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Bethany

College Bulletin 1988-1989



August 1988



Bethany College Bulletin 1988 - 1989

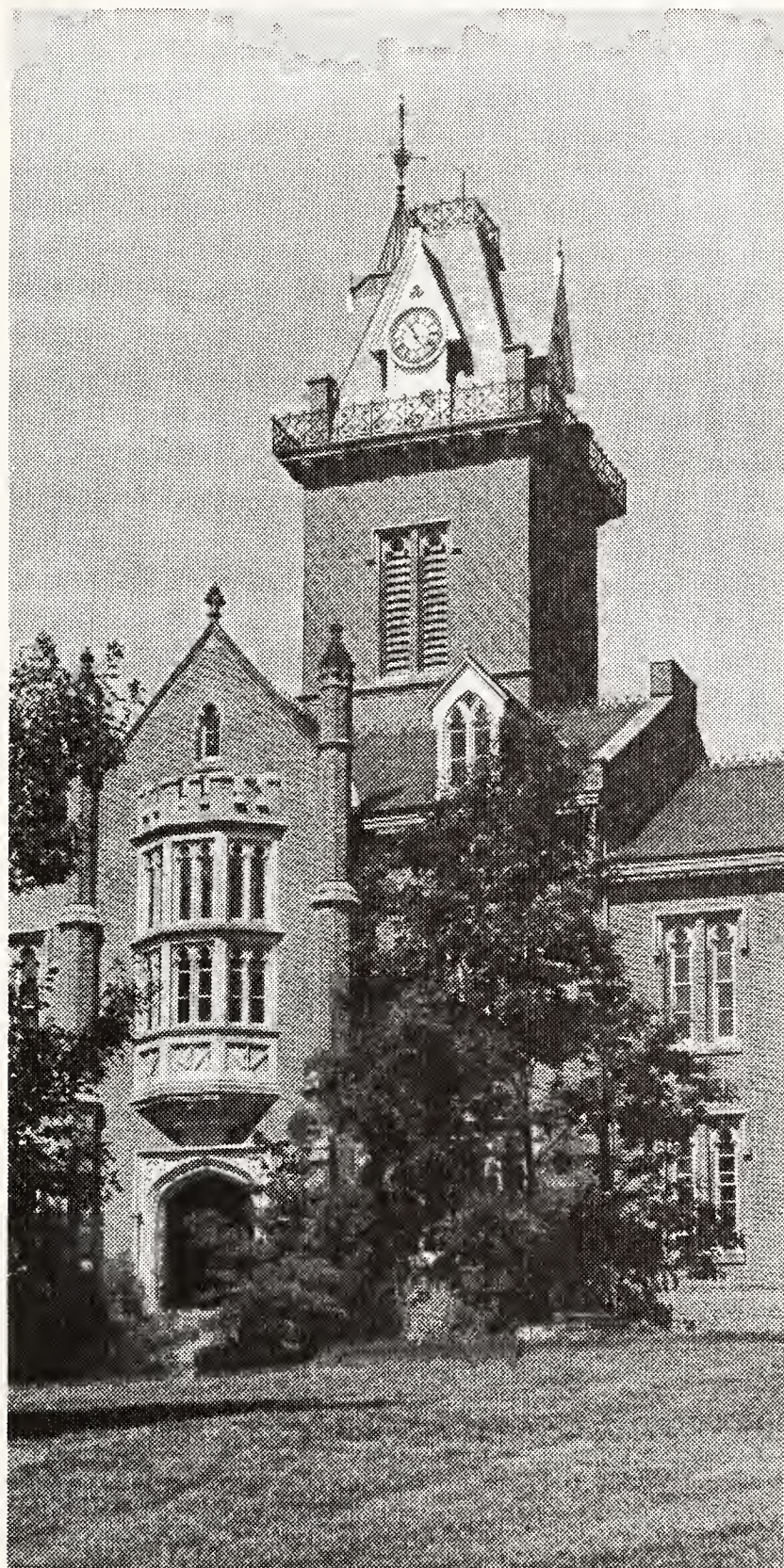


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College Calendar 1988 - 1989

The Bethany calendar consists of two 15-week semesters and a four-week voluntary interim session in January. The fall semester is from late August to before Christmas. The spring semester is from February through May. Some courses are offered over the full semester while others are for the first or second half of a semester. This division provides flexibility for students to do off-campus study and internships.

The four weeks in January are an opportunity for students to elect for use in intensive study on campus or for off-campus work. Two five-week summer terms and an 11-week summer independent study period are offered.

First Semester

27-28 Saturday-Sunday
29 Monday
30 Tuesday

5 Monday

9 Friday
12 Monday
23-25 Friday-Sunday

17 Monday
21 Friday
21-23 Friday-Sunday
24 Monday
27 Thursday

12 Saturday
14-18 Monday-Friday
18 Friday, 4 p.m.
28 Monday, 8 a.m.

13 Tuesday
14 Wednesday
15-17 Thursday-Saturday
19 Monday

August

Orientation and evaluation for new students
Registration for returning students
First day of classes for all students

September

Last day for adjustment of schedules without
academic and financial penalty;
last day to add a course
Formal Convocation
Last day to determine credit/no-credit
Parents' Weekend

October

Last day of classes for first-half semester
courses
Mid-term grades due
Homecoming Weekend
Writing Qualification Test for
Freshman Seminars
Commemorative Convocation

November

Board of Trustees Meeting
Pre-registration for second semester
Thanksgiving vacation begins
Thanksgiving vacation ends

December

Last day of classes
Reading Day
Final examination period
Final grades due

January Term

January

9 Monday	First day of classes
20 Friday	Last day of classes for first-two-week courses
23 Monday	First day of classes for last-two-week courses
30-31 Monday-Tuesday	Senior Comprehensive Examination (Written)

February

1-4 Wednesday-Saturday	Senior Comprehensive Examination (Oral)
3 Friday	Last day of classes

Second Semester

February

5 Sunday	Registration for all students; Diagnostic Writing Test for all transfers and readmissions
6 Monday	First day of classes for all students
10 Friday	Last day for adjustment of schedules without academic and financial penalty; last day to add a course
17 Friday	Last day to determine credit/no-credit

March

9 Thursday	Founder's Day and Convocation
16 Thursday	Writing Qualification Test (sophomores and juniors)
23 Thursday	Last day of classes for first-half semester courses
23 Thursday, 4 p.m.	Spring vacation begins
28 Tuesday	Mid-term grades due

April

3 Monday, 8 a.m.	Spring vacation ends
27 Thursday	Honors Day and Convocation

May

1-5 Monday-Friday	Pre-registration for first semester, 1989-90
6 Saturday, 8 a.m.	Reading period for Comprehensives begins
8 Monday	Grades due for students taking Comprehensives
15-16 Monday-Tuesday	Senior Comprehensive Examination (Written)
17-20 Wednesday-Saturday	Senior Comprehensive Examination (Oral)
19 Friday	Grades due for graduating seniors who previously took Comprehensives; last day of classes
19-21 Friday-Sunday	Alumni Weekend
22-24 Monday-Wednesday	Final examination period
25 Thursday	Final Faculty Meeting
26 Friday	Board of Trustees Meeting
26 Friday, 8 p.m.	Baccalaureate
27 Saturday, 10 a.m.	Commencement
30 Tuesday	Final grades due

Bethany Profile

Bethany College, nearly 150 years old, is a highly contemporary institution based in the tradition of the liberal arts.

The College offers a wide array of studies and awards bachelor of science or bachelor of arts degrees in the fields of Accounting, Biology, Chemistry, Communications, Computer Science, Economics and Business, Education, English, Fine and Applied Arts, French, German, Health Science, History, Interdisciplinary Studies, Mathematics, Philosophy, Physical Education, Physics, Politics and Public Policy, Psychology, Religious Studies, Science Applications, Spanish, Sociology and Social Work.

In addition, pre-professional education is available in dentistry, engineering, law, medicine, public administration, theology, and veterinary medicine.

The College's program of liberal education prepares students for a lifetime of work and a life of significance. Bethany places particular emphasis upon leadership and broad areas of communications, management, public policy and administration, and science and technology.

Bethany has excellent facilities to support the traditional offerings and its emphases, and integrates today's technology in its general education program. As one example, computing, a central feature in many academic disciplines, is offered as a field of concentration (major), and is an emphasis for the coming decade. The College's Center for Academic Computing has been enhanced with the recent addition of a visual arts center featuring up-to-date computer graphics equipment.

Bethany was founded March 2, 1840, by Alexander Campbell, educator, celebrated debater and Christian reformer who provided land and funds for the first building and served as first president.

Since its inception, Bethany has remained a four-year private liberal arts college affiliated with the Christian Church (Disciples of Christ). This religious body, of which Campbell was one of the principal founders, continues to support and encourage Bethany, though it exercises no sectarian control. Students of virtually every religious communion have been welcomed to the College.

Bethany is located in the northern panhandle of West Virginia in the foothills of the Allegheny Mountains. Pittsburgh is 48 miles to the northeast. Wheeling, W. Va., and Washington, Pa., are each a half-hour drive from the 1,600-acre campus.

Bethany students, approximately 800, represent nearly 30 states and 15 foreign countries. Typically, one third is from the East coast and the New England states. Another third represents the Mid-Atlantic Region, while the remaining one-third is from other states and countries.

Goals

In its charter, granted in 1840 by the Commonwealth of Virginia and recognized in 1863 by the newly organized state of West Virginia, the mission of Bethany College is defined as

the instruction of youth in the various branches of science and literature, the useful arts, and the learned and foreign languages.

Alexander Campbell, Bethany's founder and first President, viewed the College's mission as stated in the charter in the context of the Judaeo-Christian tradition and the thinking of the American Enlightenment, interpreting it to imply the educating of students to become useful and responsible members of society by liberating them from superstition and ignorance, the tyranny of others, and "vulgar prejudices."

Bethany College continues to accept the implications of its mission as understood by its founder. It continues to accept the responsibility for nurturing effective, honorable, humane, and intelligent citizens who believe in and will promote the creation of a world of worth and value, integrating critical reason and the spiritual dimensions of life, personal accomplishment and ethical responsibility, and individual development and service to others. It continues to accept the responsibility for promoting the development of responsible members of society who:

- are marked by a rigorous, developed intellect and substantial knowledge
- are sensitive and responsive to persons, events, issues, and people in the world around them
- become involved with and sensitive to persons, events, issues, and problems
- assume responsibility for and accept the consequences of their involvement
- humanize and make effective the institutions they affect
- are motivated to nurture and serve the persons around them
- assist in the clarification and resolution of issues and problems of the world
- know themselves and develop an examined system of ethics and values
- possess the basic skills and insights needed to undertake these tasks

The Bethany educational program is designed to implement the College's mission. It encourages students to realize their intellectual capabilities, moral capacities, and leadership potential by assisting them as they strive to fulfill each of the following specific goals:

- to discover how to acquire, evaluate and use knowledge
- to master skills of communication
- to cooperate and collaborate with others in study, analysis, and formulation of solutions to problems

- to understand contemporary issues and events
- to analyze personal values, to perceive and to deal sympathetically with the values of others, and to be open to the continued evaluation of both
- to make progress toward the selection of and the preparation for a vocation
- to integrate the various experiences of life and to see the relationship of the college experience to future development as a responsible citizen

Accreditation, Memberships

Bethany College is accredited by or holds memberships in:

- North Central Association of Colleges and Secondary Schools
- Association of American Colleges
- American Council on Education
- American Association for Higher Education
- College Entrance Examination Board
- Council on Social Work Education
- American Association of Colleges for Teacher Education
- National Council for the Accreditation of Teacher Education
- Council of Independent Colleges
- Division of Higher Education of the Christian Church (Disciples of Christ)
- Women graduates are eligible for membership in the American Association of University Women

Admission

Application

Bethany welcomes applications for admission from candidates who feel they would contribute to and benefit from a Bethany education. Admission is based on a careful review of all credentials presented by the candidate. The Committee on Admission accepts candidates it considers best qualified among those applying. In no case does the meeting of minimum standards assure admission. Acceptance is contingent upon a candidate's successful completion of secondary school.

The College seeks students who have prepared themselves for a liberal arts curriculum by taking at least 15 units of college-preparatory work. Although the College does not absolutely prescribe how these units should be distributed, it encourages a minimum of four years of English, three years of mathematics, three years of science, three years of social science and at least two years of a foreign language. For students who have developed individual curricula or are involved in experimental honors programs, the Committee on Admission makes special evaluations.

Freshmen

The application process includes: 1) furnishing a transcript of completed work; 2) the application for admission; 3) two reference letters; 4) either the College Entrance Examination Board Scholastic Aptitude Test (SAT) scores or the American College Testing Program (ACT) scores.

Supporting documents that might be of help in the process of admission, that is poetry, plays, short stories, music, artwork, photography, and journalistic writings, may also be submitted.

Bethany's policy of rolling admission enables the Committee on Admission to act on completed applications as they are received. Applicants will be notified of the Committee's decision approximately three weeks after all credentials have been received. Early admission is advised.

Application for admission to Bethany College and a decision for acceptance of the applicant will be effective for the academic year for which the application was initiated and/or for which the applicant was accepted. Thereafter, a new application must be submitted for evaluation and decision by the Committee.

Transfers

The College welcomes well-qualified transfer students. Applicants for transfer must have had a good academic record in the institution attended and must present full credentials for both college and preparatory work, including a statement of honorable dismissal. They must take the Scholastic Aptitude Test given by the College Entrance Examination Board or the American College Test (ACT) if this test has not been taken previously.

One year of study at Bethany College constitutes the minimum requirement for a degree. Applications for transfer must be filed by August 1 of the year in which entrance is desired. Decisions on these applications are announced by August 15. Application for transfer at mid-year must be received by January 15. Financial assistance is available for transfer students.

Special Advising

The Special Advising Program entails a comprehensive set of services specifically designed to support the learning disabled student in the college mainstream. The program focuses upon developing skills which will maximize students' independence for lifelong learning. Additional fees are assessed.

Community/Junior College Graduates

Students who have received or will receive an Associate in Arts or Associate in Science Degree and find Bethany's curriculum suited to their educational goals are cordially encouraged to apply.

Holders of the A.A./A.S. Degree who are accepted receive at least two years (minimum 60 hours) credit, enter as juniors, and receive all the rights and privileges of upperclass students.

The College will make every effort to assist holders of Associate degrees to complete their baccalaureate programs within two years at Bethany. However, some fields of concentration may require more than 68 additional hours beyond the 60 referred to above, depending on the type of Associate's program the student has completed.

Early Admission

Some students complete their secondary school graduation requirements a year early and decide to pursue college admission after their junior year. For those who have demonstrated maturity and show evidence of a strong academic background, Bethany offers a program for early admission. For this type of admission, the usual admission procedures must be followed. A personal interview on campus as well as a discussion between the student's college counselor and a Bethany admission officer are required.

Advanced Placement

Students may receive advanced placement and/or credit from any department in the College through a testing program. This must be accomplished before the end of the first year at Bethany College. Those who wish to receive credit by examination should consult with the Office of Career and Professional Development and the appropriate department head.

Credit may be received for courses waived as a result of high scores on the College Entrance Examination Board Testing Program for Advanced Placement. The waiving of courses or granting of credit, however, are departmental matters and require consultation with the appropriate department head upon matriculation.

Visiting Bethany

Although not required, an on-campus interview with an admission officer is highly recommended. A campus visit will enable the student to develop some understanding of the College and its expectations. A comprehensive tour, observation of classes, and interaction with Bethany students and faculty are available upon request.

Prospective students are also invited to remain overnight as the guest of a Bethany student. Meals and overnight accommodations in College housing for prospective students are provided by the College. Lodging for parents is available on campus at Gresham House, as well as nearby lodges and motels. Transportation arrangements from the Greater Pittsburgh International Airport, as well as from the Pittsburgh rail and bus terminals, may be arranged through the Admission Office.

The Admission Office is open Monday through Friday from 8:30 a.m. to 4:30 p.m. and Saturday from 9 a.m. to 1 p.m. throughout the year. Appointments may be made by calling 304-829-7611 or 800-922-7611, or by writing the Admission Office, Bethany College, Bethany, West Virginia 26032. Three days advance notice is requested to make proper arrangements.

Information on admission and registration fees, as well as details on expenses, aid and scholarships are on pages 9-13 and 28-35.

Foreign Students

Bethany is pleased to receive applications from students of other countries. Approximately 15 countries are represented on campus each year.

Students from non-English-speaking countries are required to submit, along with an application for admission, a complete secondary school transcript, the results of either the American College Testing Program (ACT) or the College Entrance Examination Board Scholastic Aptitude Test (SAT) or the Test of English as a Foreign Language (TOEFL), and at least two letters of recommendation. Applicants for the Fall Semester must submit the above stated materials by July 1.

Foreign students are also requested to complete a Foreign Student's Financial Aid Application and Declaration. This form is to be returned with admission materials by the deadlines mentioned. Although Bethany is willing to review requests for financial assistance, funds are limited.

Application for Admission

A non-refundable \$20 fee is required at the time of formal application.

Application for Readmission

Students previously enrolled in Bethany College who wish to return for additional work must file an Application for Readmission with the Registrar's Office. A \$5 fee is required at the time such application is made.

Registration Deposit

Upon acceptance for admission or readmission, a \$100 registration deposit is required of all students. Once this deposit is paid it is not refundable until after graduation or until one of the following procedures is completed. A student accepted for admission who has paid the registration deposit and subsequently decides not to attend Bethany may request in writing a refund before May 1 prior to the intended matriculation. Students not being graduated may have the deposit refunded after the last term of their attendance if written notice is given to the Business Office prior to the advance enrollment date for the next regular term. Such students may be readmitted by approval of the Dean of Students and the Business Manager.

Matriculation Fee

A \$20 fee, payable once by every new student, covers, in part, the cost of orientation and evaluation procedures for new students.

Expenses, Aid

Bethany College is a non-profit institution. Tuition, fees and other general charges paid by the student cover approximately two-thirds of the College's instructional and operational expenses. The remainder comes from income from endowment funds and from gifts and contributions. Bethany continues to keep costs as low as possible.

Charges and fees stated on the following pages apply only to 1988 - 1989.

Comprehensive Charges

Comprehensive charges for the 1988-1989 year at Bethany include the following:

Tuition and Fees	\$8,880
Room (Double Occupancy)	\$1,215
Board	\$1,935
Student Board of Governors	\$189
Bethany House-Benedum Commons	\$81

While a general charge is stated for Tuition and Fees, this fee may be divided into \$8,125 for tuition and \$755 for the following activities and services: athletics, health service, library, lectures, plays, concerts, publications, student activities, and laboratory services with the exception of music and art.

The Bethany House-Benedum Commons Fee is charged to all registered students and covers the operation and maintenance costs of the student union.

No reduction is made in student accounts for course changes made after the first two weeks of the semester. The College is required to collect a six per cent West Virginia sales tax on published charges for room and parking permits. Bethany reserves the right to change, without advance notice, the price for room, board and health insurance.

Financial Aid

Bethany believes that the funding of a student's education is primarily a family responsibility. However, financial assistance is available to those students whose resources will not fund a Bethany education and yet sincerely desire to attend. Outstanding students, regardless of demonstrated need, frequently receive scholarships and grants to attend the College. Several programs are available to such students. Inquiries are encouraged.

All need-based aid is awarded through careful evaluation of the Financial Aid Form (FAF), available from the student's guidance counselor. Designation of Bethany College as an institution to receive the processed information is required. All applicants for admission to Bethany are sent detailed information and instructions regarding the financial aid application and awarding processes, normally beginning in December.

Because of the large number of applications for financial aid, assignment of funds is made according to the date applications are processed, with April 1 established as the priority deadline for all new students. The earlier a student completes all admission materials and all financial aid materials, the sooner any financial aid awards can be determined. However, the FAF must not be completed until after January 1 as it also serves as an application for the Pell Grant Program.

A financial-aid applicant whose need for assistance has been verified by the College Scholarship Service will have his or her need met through a variety of financial aids, including scholarships, grants, loans, and College employment. The student has the option of accepting any or all of the aid offered. An interview with an officer of the College once the offer of assistance has been made can help to explain any problems. The Admission Office or the Financial Aid Office helps to arrange these interviews.

Fees for Overseas Programs

- Oxford:** \$6,205 for one semester for tuition and fees, room and board and activity fees.
- Spain:** tuition and fees for one semester (\$4,665) includes round-trip air fare, tuition and examination fees and stipend to sponsor in Spain.
- Sorbonne:** tuition and fees for one semester (\$4,665) includes round-trip air fare, tuition and stipend to sponsor in Paris.
- Tübingen:** tuition and fees for one semester (\$4,665) includes round-trip air fare and tuition.

Other Special Fees

Chemistry 490	\$20
Education 470: off-campus student teaching (<i>per semester</i>)	\$4,740
<i>(includes tuition, fees and pre-school week board privileges in the Bethany dining hall)</i>	
English 160	\$15
Physical Education 340	\$30
Physical Education 341	\$30
Each academic hour when fewer than 12	\$338
Each academic hour in excess of 16	\$292
Auditing a course, per semester hour	\$292
<i>(a student is not charged if paying regular tuition and fees and the total program, including the audit, does not exceed 18 hours)</i>	
Comprehensive Examination	\$25
Graduation Fee	\$35
Matriculation Fee	\$20
Academic Support Services (<i>per semester</i>)	\$275
Special Advising Fee (<i>per semester</i>)	\$375 to \$750
Special Examinations in any department	\$15
<i>(there is a \$15 charge for each credit hour awarded by examination)</i>	

Special Room Rates:	
Single	\$685
Double as Single	\$800
Key deposit for dormitories	\$10
<i>(refunded if key is returned)</i>	
Infirmery charge per day	\$5
<i>(after the first three days each semester)</i>	
Late registration	\$3
<i>(per day)</i>	
Automobile Registration	\$20
Sickness Insurance	\$90

Fine and Applied Arts Fees

FAA 153.....	\$10
FAA 155.....	\$15
FAA 201.....	\$5
FAA 210.....	\$25
FAA 303.....	\$15
FAA 304.....	\$15
FAA 310.....	\$15
FAA 320.....	\$15
FAA 404.....	\$15
FAA 405.....	\$15
FAA 406.....	\$15
FAA 420.....	\$15
FAA 425.....	\$20

Fine and Applied Arts fees will also be required for independent study and studio courses where departmental materials are being used.

Private music lessons, one half-hour weekly	\$90
<i>(per semester)</i>	
Organ practice, one hour daily	\$35 per semester
Instrument rental	\$10 per semester
Piano practice, one hour daily	\$10 per semester

Breakage Deposit

Chemistry and physics breakage deposits are covered by a \$10 breakage card which the student purchases each semester for every laboratory course in which the student is enrolled. In the event breakage exceeds \$10, an additional \$10 breakage card must be purchased. Unused portions are refunded at the end of each academic year.

Payment of Student Accounts

At registration, an invoice listing all charges due for the following semester is prepared for each student. Payments are due in accordance with the following schedule:

First Semester: By August 15 payment due

Second Semester: By January 15 payment due

Scholarships and loans may be applied as credit against August or January payment requirements.

Students will not be permitted to register if the payment requirements for each semester are not met. These requirements are in addition to the registration deposit. Checks or drafts should be made payable to Bethany College.

Bethany College bills for tuition, fees, room and board twice yearly; other charges are billed as incurred. Twice yearly billings are payable in advance by August 15 and January 15 for the fall and spring semesters respectively.

For accounts past due a monthly service charge of 1.5% on the first \$1,500 (18% per year) and 1% on any remaining balance (12% per year) will be charged as of the 25th of each month.

Students may not take final examinations, receive academic credit, obtain transcripts or graduate until satisfactory arrangements are made to cover financial obligations.

Monthly Payment Plans

Bethany has made arrangements with the Insured Tuition Payment Plan, EFI-Fund Management and Academic Management Services whereby student accounts may be paid on a monthly basis during the year. Arrangements to use this plan should be made prior to the registration period. Information may be obtained by writing to the Bethany College Business Office.

Student Drawing Account

The Business Office provides a limited banking service whereby students may deposit funds and draw on them as required. Students or their parents may make deposits to this recommended student drawing account which avoids the necessity of keeping on hand any substantial amount of money. All checks for this account must be made payable to the Bethany College Student Drawing Account.

Withdrawals and Refunds

After registration, there is no refund of room charges or fees. A student voluntarily withdrawing or withdrawing because of illness during the course of the semester will be charged 10 per cent of tuition charges for each week of attendance or part thereof. There is no refund of tuition after the tenth week of attendance. There is no refund in the event that a student is dismissed or asked to withdraw during the course of the semester. Board refund is prorated, based upon food costs only. Special fees are not refundable.

A student wishing to withdraw from Bethany must file written notice with the Dean of Students to qualify for refund of deposit and adjustment of other charges.

Academic Programs

Based in the liberal arts tradition, Bethany's academic program is designed to meet the educational needs of the individual while ensuring breadth, depth and integration of knowledge. Bethany has designed its program of study to help students develop basic intellect, skills of learning, examined values, and good citizenship. Leadership preparation is a central theme of the College.

Through Fields of Concentration (majors) in the traditional academic disciplines and a wide range of pre-professional studies (see listings on Page 4), Bethany prepares students for further study, for employment, and for lives marked by special accomplishments.

A rich variety of learning opportunities is provided both in and out of the classroom, ranging from seminars, lecture courses, independent studies and laboratories to musical and dramatic productions and intercollegiate and intramural sports. Many off-campus programs are offered, including study abroad.

Learning opportunities at Bethany are set within a framework of common educational goals and programs which are organized to provide direction and guidance, as well as independence and choice.

Requirements for a Bethany Degree

The Bachelor of Arts and Bachelor of Science degrees are conferred by Bethany College.

The Bachelor of Arts degree is conferred upon the student who satisfactorily completes the following requirements:

- 128 semester hours (including no more than 48 credit hours in any one academic department and no more than the maximum credit hours permitted in activity courses as described on Page 36) with a minimum cumulative grade point average of 2.00000
- a field of concentration
- the Perspectives program
- a senior project
- the senior comprehensive examination in the field of concentration
- demonstrated proficiency in expository writing
- the practicum requirement
- a freshman seminar
- the freshman interdisciplinary lecture course
- Religious Studies 100

- the residence requirement
- attendance at the commencement exercise

The degree of Bachelor of Science may be conferred upon a student who completes the Bachelor of Arts requirements and who chooses a field of concentration in biology, chemistry, computer science, interdisciplinary studies, mathematics, physics, psychology or science applications.

Field of Concentration

Every student must select a major field of concentration from one of the academic departments of the College, from among the faculty-sponsored interdisciplinary programs, or by initiating and developing an individual interdisciplinary program.

Departmental fields of concentration are described in detail in the sections of this **Bulletin** devoted to the offerings of the individual academic departments. Each field of concentration requires a minimum of 24 credit hours (exclusive of the senior project) and a maximum of 48 credit hours in courses within the department. A maximum of 24 credit hours in courses from related disciplines may also be required.

Faculty-sponsored and student-initiated interdisciplinary fields of concentration cross departmental lines. Information about faculty-sponsored fields is available from the office of the Registrar. Information about student-initiated interdisciplinary study is available in the Interdisciplinary Studies section of this **Bulletin** and from the Director of Interdisciplinary Studies. All interdisciplinary programs require the approval of the Faculty Committee on Interdisciplinary Study. All interdisciplinary programs must include a minimum of 24 credit hours (exclusive of the senior project) and a maximum of 72 credit hours.

Perspectives Program

The Perspectives Program provides more than breadth to the student's academic experience. In addition to the accumulation of knowledge in a wide variety of disciplines, it is expected that all Bethany graduates will develop perspectives on their world, each of which is, in appropriate ways, systematic, ethical and integrative. The perspectives are historical, global, religious, aesthetic, scientific, quantitative, social and personal.

All courses within the Program address three overarching concerns of liberal learning: 1) systematic issues of critical thinking about the basic assumptions, methodologies and frames of reference of the subject field; 2) ethical issues within the disciplines studied; 3) integrative issues designed to assist the student in gaining a personal perspective or point of view about the world as seen through the examined perspective.

To this end, every student must complete at least four hours chosen among the courses in each of the perspectives categories listed below, plus at least four additional hours, for a total of forty hours in the program.

Courses for which students have received credit by examination from a department as a result of high scores on the College Entrance Examination Board Testing Program for Advanced Placement or as a result of special departmental testing procedures may be substituted for the four additional hours noted above.

The list of approved courses changes each year. Only courses taken in the year they appear on the approved list will count toward fulfillment of the requirement.

Historical Foundations: *to achieve a knowledgeable view of basic aspects of the origins and the modern background of Western civilization*

Communications 401; English 370; Fine and Applied Arts 103; French 313, 351, 352; German 351, 352; History 100, 201, 202, 301, 302; Interdisciplinary Studies 251, 252; Philosophy 323, 324, 325; Physical Education 244; Spanish 351, 352, 353.

Global Awareness: *to gain an appreciation and understanding of the diversity of the world's cultures, not only Western but non-Western*

Communications 403; English 268, 285 (See January Term Catalog); French 110, 120, 130, 301; General Sciences 202; German 110, 120, 130; History 426; Interdisciplinary Studies 201, 202, 203, 204, 241; Religious Studies 341, 342, 352; Spanish 110, 120, 130.

Judaean-Christian Tradition: *to understand the religious tradition of the West, particularly the Judaean-Christian tradition, including the study of the Bible*

Religious Studies 100, 300, 302, 304.

Aesthetic Judgment: *to develop an ability to discriminate among various aesthetic forms and values and to gain a basic appreciation of the arts*

English 140, 150, 160, 261-262, 263-264, 266, 270, 288 (See January Term Catalog), 325, 326, 330, 341, 342, 351; Fine and Applied Arts 101, 102, 120, 200, 201, 270; Philosophy 358.

Life Science: *to understand the world of living things through scientific investigation, including both laboratory or field experiences and inquiry into the humanistic implications of the sciences*

Biology 100; Interdisciplinary Studies 210; Psychology 100.

Quantitative Reasoning: *to achieve a knowledgeable view of analytical and quantitative ways of examining the world*

Computer Science 143, 144, 201, 202; Mathematics 103, 201, 202, 250, 281; Philosophy 123; Psychology 103.

Social Institutions: *to grasp the basic organizing principles, structures, policies, and governing ideas of Western social (economic, political, etc.) institutions*

Communications 101, 304, 402; Economics 200, 300; General Science 101; Philosophy 352; Physical Education 243, 280; Politics and Public Policy 225, 231, 300; Psychology 243; Religious Studies 322; Social Work 120, 230; Sociology 100, 205, 210, 351, 356.

Human Personality and Behavior: *to establish insight into the ways human beings understand themselves and their behavior and development*

Education 201, 202; Philosophy 100, 124, 252, 355; Psychology 186, 324, 325, 326; Social Work 201, 202, 310; Sociology 220.

Physical Science: *to learn how to explore the physical world from atoms to stars by applying the scientific method in the laboratory, by understanding mathematical models used in the physical sciences, and by considering the place of science in human affairs*

Chemistry 100, 101, 102; General Sciences 100, 201; Physics 100, 201, 202.

All courses taken to satisfy perspectives requirements must be taken on a graded basis. All students are required to pass Religious Studies 100. Generally, this course is taken in the freshman or sophomore year, and it may be used to fulfill part of the perspectives program requirements. Students should not enroll in Quantitative Reasoning courses until they have consulted with their advisors regarding the results of the freshman diagnostic test in quantitative skills.

Freshman Program

Freshman Seminar: All entering freshmen enroll in a freshman seminar during the fall semester of the freshman year. The professor directing the seminar also serves as the student's academic advisor. (Not required for transfer students.)

Freshman Interdisciplinary Course: Freshmen take the freshman interdisciplinary course in the spring semester of the freshman year. (Not required for transfer students with junior standing at entry.)

Descriptions of the courses offered in the freshman program are on Pages 41-42.

Academic Advisor

The student-advisor relationship is the cornerstone of a Bethany education. The student and his or her advisor work together to develop appropriate classroom and experience-based programs. Freshmen see their advisors two times a week during the first semester's freshman seminars and also meet privately with advisors.

Usually during the sophomore year, students elect a major field of concentration, thus transferring to an advisor associated with their major area of interest.

Advisors are designated for freshmen, for specific fields of concentration, for each Professional Core Program, for career interests and for specific services such as campus employment, counseling, graduate programs, testing, scholarships, vocational information and guidance, and others.

A listing of advisors — for fields of concentration, career interests, the Professional Core Program and special interests — is on Page 120.

Writing Proficiency Requirement

All students must achieve and maintain an above-average level of proficiency in expository writing. They may do this by either taking the annual Writing Qualification Test or by satisfactory completion of selected writing courses offered by the English Department. Special arrangements are made for students who transfer from other colleges and transfer students should consult the Department of English immediately upon enrolling at Bethany.

Details on the Writing Qualification Test, including when it is given, as well as information on writing courses from which the student may select, are included under the Writing Proficiency Program section in the English Department, Page 68.

Practicum Program

Practicums are practical experiences encompassing values Bethany believes to be essential to a complete education. These experiences make a student's academic studies more relevant to the everyday world.

Each student must successfully complete four practicums. They require:

- an example of responsible citizenship
- an awareness of and involvement in health, physical education and recreation
- an intercultural living experience
- a vocationally oriented placement.

Students, with the assistance of the advisor and the Director of Practicums, develop proposals which must have approval of a faculty member and meet the guidelines established for each practicum. Each student completes an evaluation of the experience after each practicum.

Seniors must complete all proposals by February 10 and all evaluations by April 15 of the graduation year.

Further information is available from the Director of Practicums or the Registrar.

Senior Comprehensive Examination

Capping the Bethany education is the Senior Comprehensive Examination. The examination is scheduled after all requirements for the field of concentration (except the senior project) are met and the student has senior standing and at least a 2.00000 cumulative average in the field. Comprehensive examinations assure the College of qualitative accomplishment and lead the student to a sense of self-confidence and achievement.

The examination is both written and oral. It is offered in January and in May. The oral part of the examination is scheduled by the Registrar as soon as practicable after the written, but in no case more than two weeks later. To register to take the Senior Comprehensive Examination, a student must contact the Office of the Registrar at least two months prior to the first day of the written examination.

Students who have completed all requirements in their field may take the examination in January with the consent of their advisor(s). Students failing the examination in January may take it again in May or at any time it is regularly given within the following twelve months. If the student fails the second time, the student may petition the faculty for a re-examination during the following year. No student may take the examination more than three times.

In some departments, sections of the Graduate Record Examination (GRE) may also be considered part of or prerequisite to the Senior Comprehensive.

Students who do unusually well on the Senior Comprehensive Examination are listed at graduation as having "passed with distinction."

Senior Project

Each student must produce a project which meets the standards of his or her field of concentration.

The project is received and evaluated during the final semester of the senior year. Two to eight hours of credit are given after the final evaluation and approval of the project. Scheduling of the project is at the discretion of the department or the student's advisory committee.

The project is evaluated by at least one person in the field of concentration other than the student's advisor(s). The final evaluation is made in consultation with the student and the project is made available to the College community.

Projects range from extensive research papers to creating graphics on a computer, writing and producing a radio series, designing a brochure, writing and presenting a play.

Residence Requirement

Four years are usually required to satisfy the course and residence requirements for the baccalaureate degree. Students of superior ability may complete the requirements in less time. As a rule, the senior year or the last two semesters are to be spent in residence at the College. However, students who have had one full year of residence previous to their senior year, and who apply for and are approved by the Policy Appeals Board for off-campus study programs during their senior year, may sometimes be permitted to count that work toward graduation requirements.

Pre-Professional Study

Bethany offers pre-professional study programs in:

- Engineering
- Medical and Health Professions
- Law
- Ministry

Students participating in one of the engineering programs spend three years in the liberal arts environment at Bethany and then attend Case-Western Reserve University, Columbia University, Georgia Institute of Technology or Washington University for an additional two years. The program permits the student to earn both a bachelor's degree from Bethany and a B.S. in engineering or applied science from the cooperating engineering school upon successful completion of the five-year sequence.

Students desiring to prepare for the study of medicine, dentistry or any of the health related fields find instruction and facilities at Bethany which satisfy the entrance requirements for the best professional schools.

Medical admission tests must be taken in the junior year and specific course planning is required, beginning with the first semester of the freshman year. Bethany also provides a degree program for certified allied health professionals who have completed accredited technical programs at other institutions.

No single curricular pattern is recommended as preparation for law school, but Bethany provides the key ingredients for entrance, such as breadth of knowledge and high levels of achievement in writing, critical thinking and logical reasoning.

Students planning to enter church vocations complete their preparation in seminaries and graduate schools of religion after undergraduate preseminary studies at Bethany.

Bethany provides thorough preparation for professions in the fields of business administration, communications media, public administration, teaching at all levels, social work and many more.

Students are encouraged to contact individual academic departments, as well as the College's Office of Career and Professional Development, for academic and career planning.

Professional Core Program

The Professional Core Program is an option for every Bethany student. In electing a field of concentration, as well as a Professional Core, students broaden their possibilities for employment and their options for graduate or professional study.

Professional Core programs are available in:

- **Management**
- **Public Affairs (Public Policy/Administration)**
- **Communication (Marketing or Electronic Media)**
- **Science and Technology (Computing or Pre-Professional Science)**

Management: to assist students in describing and determining the roles, reactions and relationships of individuals and groups within a management structure. Students completing this Core should have the capacity to enter a management position in business, public agencies, schools and other organizations with a higher level of understanding and skill in dealing with management issues. Required are 18 hours: Accounting 211, Economics 200 and 280, Psychology 287, Computer Science 100. Six hours are to be taken from Economics 111, 286; Communications 302; Computer Science 140, 144; Politics and Public Policy 227, 300; or Sociology 309.

Public Affairs: to become knowledgeable about the nature of problems in the broad area of public affairs and to be able to deal with issues of public policy and public administration. Completion should enable the student to have a basic capacity to analyze and assess public policy issues and needs, to implement and administer public policy programs, to develop public policy plans and to evaluate public programs. Required are 18 hours: Politics and Public Policy 231, 232, 300; Economics 200, and Computer Science 100. An additional four hours are to be taken from Politics and Public Policy 331, 332; Economics 280, 302; Sociology 205, 309; Psychology 287; Mathematics 281; Communications 402; or Computer Science 140, 144.

Communication: to develop the student's facility to understand and to use techniques of effective communication to wide audiences. Within this core, two options are available, one in Marketing and the other in Electronic Media. Marketing focuses on a variety of communication needs within the world of business and industry. Electronic Media focuses on radio and television as media for mass communication. For Marketing, required are 24 hours from Communications 101, 301, 302; Economics 111 and 290; English 205; Psychology 287. For Electronic Media, required are 22 hours from Communications 101, 201, 261, 271, 304, 310, 311 and Fine and Applied Arts 404.

Science and Technology: to provide a basic knowledge in one of two areas, Computing and Pre-Professional Health Science. The Computing option aims at providing a working knowledge of computers, especially as related to the student's regular field of concentration, thus providing job-entry skills not typically available to those studying in traditional liberal arts fields. The Pre-Professional Health Science option provides a basic science education for those interested in pursuing health-related professions, including those seeking entrance to schools of medicine, veterinary medicine, or other professional schools. This curriculum provides the basic elements of what is usually expected of applicants to such schools.

In Computing, 14 hours are required from Computer Science 100, 201, 202, 450; plus any one of the following: Computer Science 140, 142, 143, or 144. In Pre-Professional Health Science, 40 hours of course work grouped from Animal Biology, General Chemistry, Organic Chemistry, Physics, Calculus, English. Specific courses should be carefully selected in consultation with the student's advisor and the Health Science Committee and students selecting Pre-Professional Health Science must submit a separate list of courses included in their program as worked out with advisors.

Career and Professional Development

Bethany's Office of Career and Professional Development assists students and alumni in developing life skills, planning careers and obtaining both temporary and permanent jobs. Personal and career counseling are provided and workshops are presented on such topics as resume writing, interviewing, job hunting, values, skills identification, conflict resolution and time management. The Office coordinates and schedules campus employment and corporate recruiting. It also maintains a Career Resource Center consisting of career planning literature, job announcements, a volunteer contact network of alumni and friends of the College, material on internships and graduate and professional school information. Free credential service is available to all seniors and alumni who register with the Office.

Work Internships

A student may spend a semester combining practical professional experience with formal off-campus study. A student wishing to do this must arrange a full-time job in his or her chosen area and arrange independent study integrating this work experience with formal theoretical study.

A written proposal, signed by the department in which the student intends to earn academic credit, must be submitted to the Curriculum Review Board of the College. This proposal must be signed by the faculty member charged with supervising and evaluating the project. The proposal must include a description of the student's goals in undertaking the program, a description of the experience that includes a summary of his or her responsibilities and the name of his or her supervisor, a description of the formal independent study course work, an explanation of the way in which the program relates the work experience and the formal independent study course work and a description of the methods to be used in supervising and evaluating the entire project.

Eight credit hours will be awarded for satisfactory completion of the project. No additional academic work may be taken during the semester of the project.

Washington Semester

Arrangements have been made for one or two advanced students in history, politics and public policy, economics or sociology to pursue studies in these fields under the direction of the American University in Washington, D.C. A student participating in this plan takes six to nine hours in regular academic work and six to nine hours in the study of government supervised by Bethany College and American University. Participants in the program must be recommended by the program advisor and have the approval of the Dean of the Faculty.

State Government Study

The Departments of History and Politics and Public Policy administer a program in conjunction with the West Virginia University Foundation in which an outstanding junior or senior is selected each year to spend one week in Charleston, W. Va., studying the three branches of state government. Two hours of credit may be granted for this program.

Academic Common Market

Bethany is a member of the Academic Common Market, an interstate agreement among southern states for sharing academic programs. This agreement allows Bethany students, who qualify for admission, to apply for enrollment in 80 graduate degree programs in other common market states on an in-state tuition basis. This program is sponsored by the Southern Regional Education Board. Further information concerning the Academic Common Market may be obtained by contacting Bethany's Office of Career and Professional Development.

Overseas Study Offerings

Under approved supervision and direction, qualified students may secure credit for formal work completed in foreign colleges and universities. To be eligible for study abroad, the student should normally be a junior and must have the approval of the International Education Committee.

Oxford Semester

Under this program, approximately 20 students spend the fall semester in Oxford, England, studying British literature, history, and culture with a Bethany professor. Participants are matriculated as full-time students at Bethany College, but live and study in Britain.

Paris Sorbonne Program

Under special arrangement with the Sorbonne, qualified Bethany students may enroll for a semester or full year in its Cours de Langue et de Civilisation Francaise. Bethany's official representative in Paris serves as counselor to Bethany students during their stay at the Sorbonne.

Spain Study Program

Under special arrangement with university programs at Salamanca and Pamplona, qualified Bethany students may enroll for a semester or full year.

Tübingen Study Program

Qualified students are given an opportunity to do intensive study in the German language and to work out an individualized program at the University of Tübingen, Germany.

Other Overseas Programs

There are additional overseas programs in which Bethany students have participated. The coordinator of international education programs provides interested students with information concerning programs which have been examined and approved.

External Programs

Bethany College develops special programs for older adults through intensive, short-term residential and off-campus seminars, institutes, courses and workshops. These programs are generally aimed at business, industrial, educational, professional and church organizations.

These programs are conducted through The Bethany College Leadership Center, Bethany's award-winning conference center which includes the Millsop Conference Center building, Gresham House lodge and Harder Hall educational and dining facility. The Center is another link between the College and the world at large. It is used by business corporations, government agencies and non-profit organizations for their professional training and educational needs. The Center also provides opportunities for students, such as internships, practicums and employment.

Each summer, the Bethany campus and facilities are the site for camps for youth, including camps for sporting activities, church groups, and musical groups. Retreats and workshops also are planned by or held at the College.

Educational Resources

Substantial resources are invested in the education of Bethany students. The gross assets of the College on June 30, 1987, totaled \$47,188,964. Facilities and equipment at book value were \$24,973,494 with a replacement value of approximately \$38,324,296. The market value of all endowment funds was \$26,206,461.

More than 30 academic, administrative and residential buildings are located on the 1,600 acre campus.

The principal structures are:

Old Main (1858) is the centerpiece of Bethany's academic buildings. Its tower dominates the campus and is the chief architectural feature noted as one approaches the College. Old Main is listed in the "National Register of Historic Places." The building is one of the earliest examples of collegiate Gothic architecture in the United States. Old Main restoration work has been under way since 1977 with approximately \$2.5 million invested in the project.

Commencement Hall (1872) provides the setting for convocations, concerts, lectures, dramatic presentations and other gatherings. During 1983-1984, the Hall was restored to its original state.

Grace Phillips Johnson Visual Arts Center (1984) offers facilities for computer graphics, television, painting, sculpture and design. The Sandra Weiss Berkman Studio for Ceramic Arts is adjacent to the Center. The building was formerly Irvin Gymnasium (1919). Complete renovation accomplished during 1983-1984 makes this an outstanding facility for instruction in the visual arts.

Richardson Hall of Science (1964) provides contemporary facilities for the chemistry, physics and mathematics departments and houses the Academic Computer Center. It is named for Robert Richardson, Bethany's first science professor.

David and Irene Steinman Fine Arts Center (1969) provides excellent facilities for music and theatre. A fully-equipped theatre occupies the central portion of the building. Teaching studios, studio-classrooms, a general rehearsal room for the larger choral and instrument groups, and individual practice rooms support instruction in music.

Cramblet Hall (1905) was constructed through a gift from Andrew Carnegie. Originally the library, it was remodeled in 1961 to house administrative offices. It is named in honor of two presidents of the College, Thomas E. Cramblet and his son, Wilbur.

Cochran Hall (1910) was built as a men's residence by Mark M. Cochran of the class of 1875. The interior of the building was completely remodeled during 1974-1975 to serve as a faculty office and student conference center.

Oglebay Hall (1912) a gift of Earl W. Oglebay of the class of 1869, accommodates the laboratories and classrooms for the biology and psychology departments.

Pendleton Heights (1841) was built during the College's first year by W. K. Pendleton, a member of the first faculty and second president of the College. Today it serves as home for Bethany's president. Pendleton Heights is listed in the "National Register of Historic Places."

Renner Union-Bethany House (1948) is the student union. Here are found the campus radio station, the College bookstore, a student photographic darkroom, music listening rooms, a spacious lounge, and the Admission Office. The alumni joined in 1969 with the R. R. Renner family of Cleveland, Ohio, to remodel this facility.

Benedum Commons (1969) is the modern, air-conditioned dining facility for all Bethany students. In addition to the main dining room, the building houses a snack bar, lounge facilities and several small dining rooms for special student and faculty events.

John J. Knight Natatorium (1967) contains a six-lane, 25-yard, heated pool which is used in the physical education program and for intercollegiate competition. It is named for John J. Knight, long-time director of athletics. Four tennis courts are located next to the natatorium.

Alumni Field House (1948) provides physical education facilities for men and women. It is also used for concerts. Adjacent to the field house are football, soccer and baseball fields, tennis courts, and a quarter-mile track.

The T. W. Phillips Memorial Library (1959) contains nearly 155,000 volumes of books and bound periodicals with additional collections of microforms, pamphlet files, selected government documents and circulating art prints. Periodicals and newspapers from across the nation and throughout the world arrive daily. The Library has membership in the Pittsburgh Regional Library Center and the OCLC nationwide computerized network. The Library's Campbell Room contains books, periodicals, letters, paintings, photographs and museum pieces related to Bethany's founder and first President, Alexander Campbell. Also located in the Library is the Media Center which provides instructional media materials, laboratories and production facilities.

The Leadership Center

Millsop Building (1972) is the world's first solarized satellite receiving center and houses offices, seminar rooms, exhibition areas, and a 123-seat circular conference room for continuing education activities. The center offers a regular series of conferences, seminars, and workshops for education, business, and professional groups. It is a memorial to Thomas E. Millsop, former president and chairman of the National Steel Corporation.

Gresham House (1972) is a guest facility which provides 40 rooms for overnight accommodations for visitors to the College. It is named for Dr. Perry E. Gresham, Bethany's twelfth president, and his wife, Aleece.

Harder Hall (1981) is an educational laboratory and dining facility. It adjoins Gresham House, the forty room overnight guest facility. It honors Delmar C. Harder, a pioneer in automation in the American auto industry.

College, Student Life

At Bethany, education is a total experience of living and learning. The College community offers a great variety of activities and students are encouraged to participate in those which best compliment their educational experience. Many opportunities for leadership experience are provided.

Bethany encourages the mature and responsible citizenship of its students. The College believes this citizenship is realized through measured personal freedom of each individual, as well as the community building efforts of students, faculty and administrators. College officials intervene when the rights and privileges of some are threatened by the actions of others.

During the 1985-1986 academic year, students, faculty and trustees cooperated in writing a Compact for Bethany College. This Compact is a general statement of philosophy, aspiration, and expectation regarding the way the entire Bethany community is to live together. All members of the College are urged to read and live up to the ideals of this statement. It can be found in the Bethany College Student Handbook.

Student Government

The Student Board of Governors, with representatives from all residence groups, manages a substantial budget and appropriates funds for a wide variety of student activities. Students are appointed to many faculty committees, including those concerned with curricula, athletics, religious life, international education, cultural and speakers' programs and others.

Residence halls help to shape the social life of the campus. Fraternities, sororities and house associations accommodate all upperclassmen in small, self-governed units. Students are responsible for their conduct; for academic, cultural and social programming; and for care of the facilities. Freshmen, soon after their arrival, organize and send representatives to student government.

Residence Life

Most Bethany residences are small living units accommodating 32 or 48 students and containing social and recreational facilities.

Freshmen live in somewhat larger residence halls but are granted many of the same freedoms and responsibilities of the upperclassmen. Head residents and student resident assistants give leadership and counsel to freshmen.

Phillips Hall, one of two freshmen women residences, is the most gracious residence hall on campus. Built in 1890, it was remodeled and restored in the late 1970s. The ground floor now houses a large, multi-purpose recreation room, Renner Too, and Maxwell's Coffee House and kitchen facilities.

Social, Fraternal Life

Fraternities, sororities and independent house associations constitute the primary social groups of upperclass men and women on campus. The six fraternities and four sororities are nationally affiliated and their members constitute approximately 65 percent of the student body. Representatives from each act as the coordinating agencies in fraternal affairs and activities.

Fraternities represented are Alpha Sigma Phi, Beta Theta Pi, Delta Tau Delta, Kappa Alpha, Phi Kappa Tau and Sigma Nu. Sororities are Alpha Xi Delta, Kappa Delta, Phi Mu and Zeta Tau Alpha.

The student-run College Union Program Board is responsible for much programming which includes a wide range of musical groups, from contemporary performers to opera and dance, and other cultural activities ranging from speakers to art and photographic exhibits.

In the past few years, Bethany programs centering on international business, American business and American politics have offered an array of distinguished speakers and visitors to the campus to meet with students as well as faculty. Leading these programs have been a former President of the United States, three United States Senators, two Governors, a former Governor, an Ambassador, five corporate chief executive officers and a dozen or more leaders in the fields of public affairs, business and the arts and sciences. Each program has included social interaction for students as well as seminars.

Other activities on campus which are well supported by student participation include theatre, various musical groups, intercollegiate and intramural sports and a score or more student-run clubs. The campus media (a weekly newspaper, yearbook, a magazine, a literary magazine, an FM radio station and a cable TV station) command much student interest and participation.

Religious Life

Many religious backgrounds are represented in the student body and faculty. While participation in religious activities is voluntary, there are many opportunities for religious participation on campus.

Many students find Bethany Memorial Church an opportunity for expression of their religious faith. The minister of this church, who is also the College chaplain, is available to students for counseling and advice on personal and religious matters.

The Bishop of Wheeling-Charleston Diocese of the Roman Catholic Church provides a chaplain and chapel for Catholic students. He is available daily for counseling, in addition to the celebration of Mass each Sunday and on Holy days.

The Jewish fellowship meets for worship and study. Jewish congregations in Steubenville and Wheeling sponsor the fellowship and entertain Jewish students for the high holidays.

Student Regulations

A complete description of the regulations pertaining to housing, telephones, dining rooms, health services, motor vehicles, use of alcoholic beverages and drugs, eligibility requirements, and other areas of student life is contained in the *Student Handbook*. However, applicants for admission should know the following in advance:

- 1) The College expects and enforces lawful behavior in all matters. Particular emphasis is placed upon respect for the rights of others and upon other principles of good citizenship.
- 2) With the exception of commuters (i.e. married students or students living with parents) all students are required to live in College residence halls or fraternity or sorority houses unless excused by the Dean of Students.
- 3) All students, except commuters, are required to board in the College dining hall unless excused by the Dean of Students. No refunds are granted for meals missed.
- 4) Freshmen are not permitted to bring automobiles to Bethany unless the request is approved by the Dean of Students and the vehicle is properly registered.
- 5) Violations of regulations which are not adequately dealt with by the self-governing housing unit are judged or otherwise disposed of by the Dean of Students.

Student Health Services

All students entering Bethany for the first time are required to submit a completed physical examination form before registration. The College health service is maintained by student fees, and all students are entitled to nursing service and specified access to a physician. A minimum charge for prescription medicines, ointments or injections may be added to the student's account under certain conditions.

The Bethany infirmary is on 24-hour call for illnesses and injuries which occur during the academic year. Service is not available at the infirmary during vacations and recess periods. Students who suffer serious illness and accidents are usually treated at the Wheeling Hospital, located 15 miles from the town of Bethany. Ambulance service for emergencies is available.

The College physicians have regular office hours during the week for free consultation. In case of an emergency operation, when the parents cannot be reached, the Dean of Students, upon the recommendation of the College physician, assumes the responsibility of giving permission for treatment.

Bethany provides medical, surgical, and hospitalization insurance. All students are automatically included in the coverage from September 1 to August 31 and are charged accordingly unless the appropriate waiver is forwarded to the Business Office. Expenses for outside consultation and treatment are the responsibility of the student in all cases when not covered by insurance.

Bethany has had a campus substance abuse program since 1981, which has been continually refined and improved in the light of national trends and current information. Under the leadership of the Chair of the Social Work Department in association with the staff of the Dean of Students office, the Health Services Staff, the Counseling Staff, and off-campus Certified Alcohol and Substance Abuse Counselors, the College provides community-wide educational workshops, support groups, and intervention for those in jeopardy.

Intercollegiate Athletics, Intramurals, Recreation

Bethany College is a member of Division III of the National Collegiate Athletic Association. Women's and men's teams participate in the Presidents' Athletic Conference. Members of the Conference, in addition to Bethany, are Carnegie-Mellon, Grove City, Thiel, Washington & Jefferson, John Carroll and Hiram. Men's teams compete in baseball, basketball, cross country, football, golf, soccer, swimming and track. Women's teams compete in basketball, field hockey, soccer, softball, and volleyball, with individual opportunities for varsity participation in cross country, swimming and track.

Club sports teams provide intercollegiate competition in men's ice hockey and men's and women's lacrosse.

Recreation is provided for the entire student body through an extensive intramural and open recreation program. There is ample opportunity for students wishing to pursue everything from archery to rafting, backpacking to jogging and team sports.

Facilities are located on campus and nearby for football, racketball, softball, baseball, basketball, volleyball, soccer, tennis, swimming, golf, cross country, track, table tennis, bowling, wrestling, badminton, horseback riding, body mechanics, dancing, gymnastics, aerobics, skiing, jogging, camping, hiking and nature study.

Scholarships, Recognition Awards

Bethany recognizes promise and intellectual attainment by awarding a large number of scholarships. These awards vary in value and are available to a limited number of entering students. Most scholarships are awarded to freshmen on a four-year basis but are continued from year to year only if the recipient has met the following conditions:

- A satisfactory scholarship index
- Satisfactory conduct as a student
- Worthwhile contributions to the College program
- Constructive citizenship in the College community
- Payment of student accounts as scheduled

Each fall, Bethany holds the **Competitive Scholarship Opportunity**, a program which offers tuition grants, regardless of financial need, in areas of social sciences, physical and life sciences and the humanities. These scholarships are awarded on the basis of performance on a competitive examination, secondary school record, standardized test scores and personal qualities.

Each spring, Bethany offers its **Kalon Leaders Program** in which participants vie for four-year tuition grants, also regardless of financial need. Selection is based upon past leadership achievements, secondary school record, a required essay and references. Candidates are interviewed by Bethany faculty and the results of these interviews are used in the selection process.

Bethany offers a wide range of scholarships, designated and external trust scholarships as well as sustained awards and loan funds.

These awards, most named for distinguished alumni and faculty members and friends of the College, are awarded to worthy and eligible students. Some are designated for specific fields and interests.

Awards are made by the President and by the Scholarship and Financial Aid Committee in accordance with the requirements of a particular endowed fund.

A complete listing of all scholarships is available from Bethany's Office of Development, the Office of the Dean of the Faculty, and the Office of the Dean of Students.

Achievement Recognition

Bethany encourages achievement in scholarship and leadership in student affairs by public recognition at Commencement, Honors Day and on other suitable occasions.

Graduation Honors

Students who have done academic work of unusual merit are graduated with honors: *Summa Cum Laude* (3.85), *Magna Cum Laude* (3.65), or *Cum laude* (3.35). The awarding of honors is determined upon the basis of total quality points earned, standing in the Senior Comprehensive Examination, and the recommendation of the student's advisor.

Senior Fellowships

Certain members of the junior class may be designated as senior fellows for the following year. The selection is made from students who have demonstrated unusual excellence in their field of concentration and who, by character and ability, can do special work in a department or area as an assistant in instruction or research.

Usually no more than 12 full-year senior fellowships and one senior fellowship *at-large* (or the equivalents) are awarded in any one year. Usually no more than one full-year appointment (or the equivalent) will be made in any one department or area. Although the title of *senior-fellow-at-large* is provided primarily for capable students involved in interdisciplinary programs, students in other fields of concentration may be nominated for this category.

The selection of senior fellows is made by the Honors Committee from nominations usually presented by department heads.

Dean's List

At the end of each semester, students who have rated high academically (grade point average of 3.65 or better) and have completed at least 12 graded hours during the

semester are designated as "Students Distinguished in Scholarship." Often called the Dean's List, this distinction is determined by the Honors Committee.

Honor Societies

A number of honor societies have been established at Bethany through the years to recognize academic achievement and campus leadership.

Gamma Sigma Kappa is a scholastic society founded at Bethany in 1932. Degree-seeking students who have achieved a cumulative scholarship index of at least 3.70 (over at least four consecutive semesters and provided that in no semester their scholastic index falls below a 3.00 and provided the student has completed at least 12 graded hours in each of the semesters) may, upon recommendation of the Honors Committee, be considered for membership. Usually, however, not more than 10 percent of any class will be recommended.

Bethany Kalon is a junior and senior society established in 1948 to give recognition to students of high character who have demonstrated competent and unselfish leadership in student activities and have been constructive citizens of the College community. Selection is made by the members of the society with the advice and approval of the Honors Committee.

Alpha Phi Chapter of Beta Beta Beta is for students of the biological sciences. Its purpose is to stimulate sound scholarship, to promote the dissemination of scientific truth, and to encourage investigation into the life sciences.

Alpha Beta Gamma is an honorary organization in education dedicated to recognizing and fostering professional concern, involvement, and experience in education.

Gamma Upsilon Chapter of Lambda Iota Tau. Lambda Iota Tau is an international honor society for the encouragement and reward of scholastic excellence in the study of literature. Membership is limited to juniors and seniors who have a cumulative scholarship index of 3.0, who have completed a minimum of 12 semester hours of literature courses with at least a 3.0 grade-point average in them and in all prerequisite courses, and who have presented a scholarly, critical, or creative paper which has been accepted by the chapter. The chapter presents an annual award for the best senior project in literature. Lambda Iota Tau is a member of the Association of College Honor Societies.

Alpha Chapter of Omicron Delta Epsilon, an international honor society in economics, was established in 1960 to recognize excellence in the study of economics. Membership is limited to students who have completed a minimum of 16 semester hours of economics, including either Economics 301 or 302, and who have achieved both a departmental and overall grade-point average of 3.25 or better.

Beta Gamma Chapter of Alpha Psi Omega. Alpha Psi Omega is a national recognition society in dramatics. Students qualify by faithful work in playing major and minor roles or working with technical or business aspects of theatre.

Mu Epsilon Chapter of Phi Alpha Theta was established at Bethany in 1967 to recognize excellence in the study of history. Its membership is limited to those students who have completed at least 12 hours of history with a grade-point average of 3.1 or better and with at least a 3.0 grade-point average in two-thirds of all other studies. Members must also rank in the upper 35 per cent of their class.

Bethany Chapter of the Society for Collegiate Journalists, a national recognition society in journalism, is designed to stimulate interest in journalism, foster the mutual

welfare of student publications, and reward journalists for their efforts, service, and accomplishments.

Kappa Xi Chapter of Sigma Delta Pi is an honor society for those who attain excellence in the study of the Spanish language and the literature and culture of the Spanish peoples. Students who are at least second semester sophomores and have a high scholastic index and who have completed at least one advanced course in Spanish literature are eligible for membership.

Epsilon Chi Chapter of Kappa Pi is for students of graphic arts. Its purpose is to uphold the highest ideals of a liberal education, to provide a means whereby students with artistic commitment meet for the purpose of informal study and entertainment, to raise the standards of productive artistic work, and to furnish the highest reward for conscientious effort in furthering the best interest in art in the broadest sense of the term.

Alpha Chapter of Kappa Mu Epsilon, a national honor society in mathematics, was established in 1975 to recognize outstanding achievement in mathematics. Its membership is limited to those students who have completed at least three semesters at Bethany, rank in the upper 35 per cent of their class, have completed at least three mathematics courses, including one semester of calculus, and have a grade-point average of 3.0 or better in all mathematics courses.

Sigma Tau Epsilon music honorary promotes participation and appreciation of music by encouraging attendance at recitals, sponsoring field trips to concerts and providing an opportunity for students of music to meet and exchange ideas. The honorary also encourages participation in College musical groups and solo recitals while upholding high standards of musical performance. Qualifications for membership include at least a 3.0 average in eight or more hours of music.

Phi Delta Psi is a physical education honorary for both men and women which encourages scholarship, leadership, fellowship, high educational standards and participation in departmental activities. To be eligible, students must be at the second semester level of the sophomore year and achieve a grade-point average of at least 3.0.

Pi Gamma Mu is a social science honorary for men and women who have achieved high academic standing in the study of history, economics, political science, sociology and geography. A 3.0 average in at least 20 hours of study in these fields and standing in the top 35 percent of their class are required for membership.

Awards

Oreon E. Scott Award is presented to the graduating senior who has achieved the highest academic record over a four-year period of study. The donor of this award was a long-time Bethany trustee and a graduate of the class of 1892.

Anna Ruth Bourne Award stimulates scholarship among the women's social groups. A silver cup, provided by an anonymous donor in honor of the former distinguished head of the English department, is awarded to the recognized women's group whose active membership earns the highest scholarship standing each semester. The group winning the cup for four semesters is presented with a smaller replica as a permanent trophy.

W. Kirk Woolery Award encourages scholarship among the men's social groups. A silver cup, donated by friends of the late Dr. Woolery, a former Dean and Provost of the College, is held by the recognized men's social group or housing organization whose

membership (active membership only in the case of fraternities) earns the highest scholarship standing each semester. Any group winning the cup for four semesters is presented with a smaller replica as a permanent trophy.

The Beta Beta Beta — B. R. Weimer Award, established in honor of the late Bernal R. Weimer, Professor of Biology and Dean of the Faculty, is given each year to the senior in biology who has attained the highest academic rank in this field of concentration.

The Beta Beta Beta Prize is awarded the student who has received the highest grades in the initial courses in biology.

Florence Hoagland Memorial Award, given by a graduate of the class of 1944, is presented to the outstanding senior English major. The award honors the memory of the late Miss Hoagland who was for many years Professor of English at Bethany.

Christine Burleson Memorial Award, given by a graduate of the class of 1936, is presented to a senior English major who has attained excellence in this field of concentration. The award honors the memory of the late Miss Burleson who was Professor of English and Dean of Women from 1932 to 1936.

Cammie Pendleton Awards, named in honor of Miss A. Campbellina Pendleton, Professor of Language and Literature at Bethany from 1884 to 1909, are presented to the outstanding junior and sophomore concentrating in English. The awards are given by Dwight B. MacCormack, Jr., of the class of 1956, in memory of his grandmother, Dr. T. Marion MacCormack.

E. E. Roberts Distinguished Prize in Campus Journalism is awarded to an outstanding student who excels in work with one of the student media, in academic work in the Department of Communications, or both.

Winfred E. Garrison Prize is presented in recognition of outstanding achievement in one or more areas of philosophy. The award honors the memory of the late Dr. Winfred E. Garrison, a member of the class of 1892, whose humane concerns and scholarly achievements contributed significantly to the area of higher education, history, and philosophy.

Freshman Chemistry Award is presented each year to the student who attains the highest grade-point average in a freshman-level chemistry course.

Outstanding Junior Woman Award is provided by the Pittsburgh Bethany College Club, comprising the Bethany alumnae of Pittsburgh. This award is based on qualities of leadership, character, conduct, and scholarship. The club has placed a plaque in Phillips Hall on which names of the winners are engraved. In addition, an individual gift is made to the recipient.

Vira I. Heinz Award is granted to the junior woman who has distinguished herself by leadership, character, conduct, and scholarship and whose proposal for foreign travel most significantly supplements her educational objectives. This award for summer travel is provided by the fund of the late Vira I. Heinz, recipient of the honorary Doctor of Religious Education degree from Bethany in 1969.

Benjamin Chandler Shaw Travel Award is granted to the junior man who has distinguished himself by leadership, character, conduct and scholarship and whose proposal for foreign travel most significantly supplements his educational objectives. This award is funded by an anonymous friend of the College in recognition of the late Dr. Shaw, Bethany's George T. Oliver Distinguished Professor of History and Political Science Emeritus. Dr. Shaw joined the Bethany faculty in 1935, served from 1945 to

1966 as head of the Department of History and Political Science and continued part-time until 1975.

The Richard B. Kenney Freshman Leadership Award is granted to a freshman who has demonstrated outstanding scholarship, leadership and character at Bethany, who has become actively involved in Bethany, and who has contributed service and devotion to the College community. The student must achieve at least a 3.50 grade point average during the first fall semester at Bethany. The award honors the late Richard B. Kenney, T. W. Phillips Professor of Old Testament Literature who taught at Bethany from 1964-1986. The Award was established by the Freshman Activities Council of 1986-1987.

Bettie Blanck Travel Award is made to the student whose proposal for foreign travel best promises to augment study in English literature. The award was established by Thomas A. Hopper, class of 1967, in honor of his mother, a member of the Class of 1944.

W. F. Kennedy Prize is given to the outstanding young man in the junior class. This award, established by W. F. Kennedy of Wheeling, West Virginia, is awarded on the basis of the student's contribution to the College community life through leadership in activities, in personal character, and scholarship.

Pearl Mahaffey Prize is awarded to the outstanding senior major in Languages. The award was established by Mrs. Walter M. Haushalter and other former students of Bethany's emeritus professor of foreign languages. The prize honors Miss Mahaffey, a faculty member from 1908-1949 and a trustee of the College at the time of her death in 1971.

Shirley Morris Memorial Award was established by Theta Chapter of Zeta Tau Alpha in memory of Shirley Morris, a loyal member and past president of the chapter. It is given to an outstanding student in the field of modern languages. Selection is made by the Department of Foreign Languages.

Margaret R. Woods Prize, sponsored by the Kappa Xi Chapter of Sigma Delta Pi, is awarded to the outstanding Spanish major. The prize honors Miss Woods who was a faculty member from 1943 until her retirement in 1965. Selection is made by the Department of Foreign Languages.

Auguste Comte Award is presented to the senior of the Sociology Department for outstanding scholarship and keen interest in the field. The award is named after the founding father of the discipline.

Charles H. Manion Award is made to the outstanding senior in Fine and Applied Arts with an emphasis in one of the Art areas. The award memorializes Charles H. Manion, long-time trustee of Bethany College who was associated with the steel industry in the Ohio Valley and who enjoyed painting. The prize is provided by his daughter, Mrs. Leonard Yurko, Weirton, West Virginia.

Theodore R. Kimpton Prize is awarded to the outstanding French student. This prize, which is restricted to those students whose native language is other than French, was established by Theodore R. Kimpton, assistant professor of foreign languages at Bethany prior to his retirement from full-time teaching in 1975.

George K. Hauptfuehrer Award in Music is co-sponsored by the Music Society and Sigma Tau Epsilon in honor of George K. Hauptfuehrer, Professor of Music and Head of the Department of Music Emeritus. The award is presented to the Bethany student who has demonstrated musical excellence and has participated actively in campus musical organizations. The award is open to both majors and non-majors, with preference given to seniors.

J. S. V. Allen Memorial is a fund established by the family and friends of Professor Allen to provide for an annual award to the outstanding physics student.

Frank Alfred Chapman Memorial is a fund established by Dr. Stanton Crawford to provide for an annual award to the outstanding history student. Preference is given to students of American history and the Ohio Valley.

Osborne Booth Prize is given to the student who excels in the field of religious studies and in the overall academic program. The late Osborne Booth was T. W. Phillips Professor of Old Testament when he retired in 1964 after 35 years of teaching at Bethany.

The Aleece C. Gresham Award, announced each spring at the May Morning Breakfast honoring senior women, was initiated in 1987 and is presented to a senior woman who has attended Bethany for at least five semesters. To be eligible for selection, senior women must have a grade point average of at least 2.5 or better, have participated in and displayed leadership in a variety of co-curricular activities and must have shown dedication and commitment to Bethany College.

Francis O. Carfer Prize is given to the senior who, in the judgment of the Honors Committee, has made the most outstanding contribution to the College. Mr. Carfer, a trustee of Bethany College for 29 years, was a graduate of the class of 1909. Recipients of the award must display sound academic accomplishments and characteristics of loyalty, service, and devotion to Bethany.

W. H. Cramblet Prize recognizes outstanding achievement in mathematics. It is named in honor of Wilbur H. Cramblet, the eleventh president of Bethany College.

John J. Knight Award is presented to the senior male Physical Education major displaying outstanding scholarship and athletic participation during his four years at Bethany.

S. Elizabeth Reed Award is presented to the senior woman showing outstanding scholarship and athletic participation during her four years at Bethany.

Frank Roy Gay Award, established in 1982, is given to the senior interdisciplinary major who maintains a grade point average of 3.5 or above and displays outstanding leadership qualities in the Bethany community. The award is named for the former Professor of Classics at Bethany who taught English literature, religion and philosophy.

A. Kenneth Stevenson Theatre Award is presented each year to the outstanding Bethany junior or senior of any discipline with a grade point average above 3.2 who has contributed the most significantly to Bethany College Theatre activity. The award also provides for guest artists to enhance the program in Theatre. A. Kenneth Stevenson of Washington, Pa., was a long-time supporter of the Bethany College Theatre program until his death in 1979. Mrs. A. Kenneth Stevenson, her sons, Drew and Mark, both graduates of Bethany, and members of the Department of Fine and Applied Arts make the yearly selections.

Forrest H. Kirkpatrick Award is presented annually to the outstanding senior concentrating in economics and business. The award is named in honor of Dr. Kirkpatrick, long-time professor and dean of the College.

The Rush Carter Prize in music is presented to a member of the senior class in recognition of outstanding achievement in music. The prize honors the memory of the late Professor Carter who was a member of the Bethany faculty from 1934 to 1945.

The Edna W. Woolery Bibliography Prize is awarded to a senior student and to a freshman student who have individually compiled a bibliography and who request that it be considered for receiving the award. Edna W. Woolery was a Librarian at Bethany during the 1950s. In the event that the Award, established in 1981, is not granted in any year, the funds are used to purchase Library books. Additional information is available from the Librarian.

Wall Street Journal Award is given to the student majoring in Economics who has the highest average in selected department courses and has shown strong participation in departmental activities.

Senior Chemistry Award is granted to the senior concentrating in chemistry who has achieved the highest cumulative average in the Department, including the record made on the Senior Comprehensive Examination.

The Thomas R. Briggs Award is presented annually to the senior in psychology who has maintained the highest academic average in the department. The award is a memorial to the late Thomas R. Briggs, Class of 1978, recipient of the Psychology Society Award in 1978.

Society for Collegiate Journalists Award of Merit is presented to an upperclass writer or editor for significant contributions to campus student publications.

WVBC-FM Senior Award is given to the senior who for four years has lent qualities of dedication, loyalty, leadership, talent, and creativity to WVBC's operations.

WVBC-FM Talent Award is presented to the member of the WVBC staff who has offered the most outstanding continuous radio programming during the year.

Freshman Writing Prizes, provided by alumni and awarded by the Department of English, are given annually to the authors of the best essays written in Freshman Seminars. Each seminar leader submits the two best essays from the group and the winning essays are determined by a panel of judges.

Research Awards

The Gans Fund Awards are presented to juniors, seniors and graduates of the College who are engaged in approved study and research in some specific field of the sciences at Bethany College or elsewhere. The direct charge is "for the encouragement of research and discovery in the various fields of science." The awards were established by Wickliffe Campbell Gans of the Class of 1870 and Emmet W. Gans in memory of their father and mother, Daniel L. and Margaret Gordon Gans.

Academic Procedures

Course Load

A normal semester load is 16 hours. A student may elect activities courses such as music, chorus, band, physical education, up to two hours with no additional fee charge, making the maximum academic course load 16 hours plus two hours of activities courses. Permission to take additional courses must be obtained from the Dean of the Faculty. Fees will be charged for any such approved courses. Applications for excess hours are available in the Registrar's Office.

A full-time student is defined as any student carrying at least 12 hours per semester.

Activity Courses

Some courses which emphasize practice and performance are listed as activity courses. Of the 128 semester hours of credit required for a Bethany College degree, no more than 8 credit hours may be earned in activity courses and no more than 4 of these 8 credit hours may be earned in activity courses offered by a single department. A student may enroll in additional activity courses which will be listed on official transcripts and become part of the student's cumulative record.

Independent Study

Each department offers independent study for those students who have demonstrated the ability to work individually in some area of special interest. The student selects an area of study, subject to the approval of the head of the department, after which he or she completes an Application for Independent Study in the Registrar's Office before the start of the semester.

Cross-Listed Courses

When a course which is part of a department's *requirements* for its field of concentration is cross-listed (among the course offerings in more than one department), a student concentrating in that field may register for the course in any department in which it is listed, but the course will count as part of the maximum credit which may be earned by the student within the department of his or her field of concentration.

Course Offerings

Most courses listed in departments are offered annually. Many, however, are offered every other year and a few are offered in three-year cycles. Students should see respective department heads for long-range course planning.

Grading System

Letter grades given and their equivalents in quality points are:

A..... 4.0	B— 2.75	D+ 1.25
A— 3.75	C+ 2.25	D..... 1.00
B+ 3.25	C..... 2.00	D—75
B..... 3.00	C— 1.75	F..... .00

Students are required to take at least 100 hours of letter-graded work.

Grades mean: A, *Superior*; B, *Excellent*; C, *Average*; D, *Below Average*; F, *Failure*.

Other report abbreviations and their meanings are:

- Cr.** *Credit*. No quality points.
- NCr.** *No-Credit*. No quality points or academic penalty.
- NG.** *No grade*. Used at mid-term only.

Inc. *Incomplete*. No quality points. Incomplete work is a result of sickness or some other justifiable reason. An incomplete must be removed by the end of the fourth week of the following semester, unless an extension of time is granted by the Dean of the Faculty. It is not possible for a student to remove an incomplete after 12 months.

W. *Withdrawn*. Indicates withdrawal from a full-semester course before the end of the ninth week of the semester, or withdrawal from a half-semester course before the end of the fifth week of the course. Carries no quality points or credit hours.

Any student who carries 12 hours of letter-graded academic work may elect to take additional work on a Credit-No Credit basis in courses which are not used for the field of concentration or the Perspectives Program or a Professional Core.

A report of the scholastic standing of students is received at the Registrar’s Office at mid-semester in addition to the final semester reports. These reports are sent to the faculty advisor and the parents or guardians of each student.

Classification of Students

For sophomore rank a student must have at least 25 hours of academic credit. Admission to full junior standing is conditioned upon the student having at least 60 hours of academic credit. For senior class rank the student must have at least 94 hours of academic credit.

Students are not considered candidates for the baccalaureate degree until they have been granted senior classification, have filed an application to take the Senior Comprehensive Examination in their field of concentration, and have filed an application for a degree.

Change of Schedule

During the first five class days of each semester, a student, with the approval of the advisor, may drop or add any course. No classes may be added after this time. A student may not withdraw from a full-semester course after the end of the ninth week of the semester or from a half-semester course after the end of the fifth week of the half-semester.

Class Attendance Policy

Students are expected to attend all classes and appropriate laboratory meetings of a course and to participate in all outside activities that are a part of the course.

It is the responsibility of individual instructors to evaluate the importance of participation in determination of course grades. Students and faculty should demonstrate concern for each other in attendance matters. The Dean of Students grants excused absences in the event of serious, personal or family emergencies or authorized College events.

Special Examinations

A student justifiably absent from a final examination or a test given in connection with regular class work is permitted to take a special test without payment of fees with the consent of the instructor and approval of the Dean of the Faculty. For any other examination a fee must be paid at the Business Office before the examination is taken, and the proper receipt must be presented to the instructor at the time of the examination.

Probation

The term "on probation" is applied to students who are allowed to continue at Bethany after having failed to meet the standards expected by the faculty and administration. Students may be placed on probation for any of the following causes:

- 1) Unsatisfactory scholastic record. A student will be placed on probation when the grade point average in any semester is below 1.70 for Freshmen, 1.80 for Sophomores, or 2.00 for Juniors and Seniors.
- 2) Unsatisfactory class attendance during the semester or preceding semester.
- 3) Unsatisfactory conduct at any time.

Probation is intended to be a warning to students (and to their parents or guardians) that their record is unsatisfactory and that unless significant improvement is made they will be asked to withdraw from the College. At the end of a semester on probation the student's total record is reviewed. Continued enrollment depends upon the trend of academic performance. The Policy Appeals Board may dismiss any student if the student is not likely to meet the requirements for graduation in the usual period of four years. An extension of the four-year period is granted only when there are extenuating circumstances.

Withdrawal

An honorable dismissal is granted to students in good standing who may desire to withdraw from the College if they have satisfied their advisor and a responsible officer of the College that there is a good reason to justify such action. Students asking to withdraw should present a written request to the Dean of Students along with a statement of approval from parent or guardian. The recommendation of the Dean of Students is next presented to the Business Manager and then to the Registrar for final record. No withdrawal is considered complete until this procedure has been carried out.

Transcript of Records

Students wishing transcripts of records in order to transfer to other schools or for other purposes should make application to the Registrar's Office at least one week before the transcript is needed. Transcripts are issued only at the request of the student, and official transcripts are sent directly to the college or university specified by the student. One transcript is furnished to each student without charge; for each additional transcript a fee of \$1.00 is charged. When three or more transcripts are ordered at the same time, the first transcript is \$1.00, whereas the others cost \$.50 each. Fees must accompany the request. All financial obligations to the College must be paid before a transcript is issued.

Invalidation of Credits

Courses completed at Bethany or elsewhere, more than 10 calendar years before the date of proposed graduation, are not accepted for credit toward graduation. All candidates are expected to comply with degree requirements in effect at the time of acceptance of the degree application. With the approval of the Policy Appeals Board and the payment of the required fee, the candidate may take examinations, as administered by the various departments, for courses included in the current curriculum, to reinstate academic credit that may have been declared invalid because of date.

Policy Appeals Board

The faculty members who sit on the Policy Appeals Board evaluate student requests for exceptions to regular academic policies and regulations. Student requests are submitted in writing and should include the advisor's recommendation.

Changes in Regulations

Bethany reserves the right to amend the regulations covering the granting of degrees, the courses of study, and the conduct of students. Membership in Bethany College and the receiving of its degrees are privileges, not rights. The College reserves the right (and the student concedes to the College the right) to require the withdrawal of any student at any time.



Course Descriptions

Freshman Studies and Freshman Seminar

Freshman Studies

Interdisciplinary Lecture 100

The Origins of Western Thought III: The Modern World

4 hours

This course centers on the modern world and its origins and stresses the basic ideas, historical events, aesthetic styles and primary writings which have shaped the modern world. *Must be taken in the first year by all new freshmen and by all transfer students who matriculate as freshmen or sophomores.*

Freshman Seminar

4 hours

Sec. A. Drugs, Booze and You

This course will explore the use of drugs and alcohol in contemporary society and the effects this use has on individuals, families, and communities. Current topics to be studied will include the use of drugs in sports, community education programs, federal, state, and local laws governing drug use, and law enforcement activities. Contemporary issues also include diagnosis and treatment programs, adult children of alcoholics, teenage drinking and drug use, and driving under the influence. Students will have the opportunity to explore individual decisions concerning the use of drugs and alcohol and issues of personal growth and maturity associated with the use of mood-altering chemicals.

Sec. C. Sensitivity to the Natural World

This seminar is an introduction to the natural world based upon the observations of plants and animals in their natural settings. Most sessions will be held outdoors at Bethany and at several nearby, important natural sites.

Sec. D. Science and Pseudoscience: The Need for Skeptical Inquiry

Surveys of American youth have shown a wide-spread belief in the pseudosciences such as astrology, numerology, biorhythms, clairvoyance, ESP, reincarnation, UFOs, and fringe medicine. Thus, there is a need for a structured look at various pseudosciences and how each fails the test for being scientifically valid. The role that pseudoscience has played in the history of science will be considered. The limitations of science, even in our modern society, will be examined and debated.

Sec. E. Hippocrates to AIDS: The History of Medicine

This seminar studies the history of medical practice beginning with the ancients and continuing to the recent successes and crises of the medical profession. The contributions of specific physicians will be examined as well as social and ethical problems in the medical profession.

Sec. F. American Scandals

This seminar will research famous scandals in American history. Scandals such as Teapot Dome, Chicago Black Sox, Watergate, and Irangate will be examined, and from conflicting reports, students will attempt to answer the following questions: What really happened? Who was involved? What caused it to happen? What was the effect of what happened? How can we keep it from happening again?

Sec. G. Entrepreneurial Spirit

This seminar will study the entrepreneurial spirit in America. The dimensions of the entrepreneurial spirit will be explored through various readings. There will be visits and interviews with local entrepreneurs. Self-administered tests will be used to determine the degree to which individual students subscribe to the entrepreneurial spirit. The major focus of the course will be a

situation in which teams of students start their own business. Finally, students will explore opportunities for enterprise while at college.

Sec. H. Crime and Its Detection

A study of crime fiction and film from Conan Doyle to the present. Emphasis on crime fiction as intellectual puzzle, social commentary, and metaphor for the age. Students will examine works by Doyle, Kafka, Chandler, John D. MacDonald, and others. They will also engage in a simulation game and a mock trial.

Sec. I. The Superpowers in the Nuclear Age

The course will explore two basic themes, interrelated and converging. First, the origins, development, and conduct of the Cold War, and second, the development of nuclear weapons and their impact on superpower diplomacy.

Sec. J. Living Off the Land — A Journalist's Travel Guide

Students will create a realistic diary of hypothetical travels throughout a foreign territory of their choice. They will be working for a specific medium (newspaper, television, photojournalist, freelance writer, even a novelist gathering research material) of their choice. They will have a budget, must account for their expenses, and will have to do actual research relative to travel logistics. They will be required to file stories regularly as well as written and oral reports on the various aspects of their travels and the functioning of their chosen journalistic assignment. A weekly personal travel diary will also be required.

Sec. L. The Challenge of Becoming an Adult

The purpose of this course is to promote self-understanding and insight by examining the developmental tasks associated with early adulthood. Topics to be discussed may include becoming independent of the family, restructuring family relationships, choosing a career, establishing intimate relationships, and assuming the responsibilities of marriage and parenthood. Viewed as experiencing a transition from late adolescence to early adulthood, each student will be encouraged to develop a personal perspective that integrates past accomplishments and current strengths with future goals.

Sec. M. Crime and Punishment

A study of the nature and causes of criminals and crime followed by an examination of systems of punishment and rehabilitation will constitute the major activity of this course. Students will also tour prisons and briefly intern in a prison if arrangements can be made (this is a big if).

Sec. N. Landmark Experiments in Science

The basis for our present understanding in physics, chemistry, biology, and the other sciences is modern atomic and molecular theory. This theory has evolved since about 1800 mainly as the result of fewer than twenty ingenious experiments. Students in this seminar will have the opportunity to perform several of these classical experiments and at the same time explore the historical, philosophical, and scientific implications of each.

Sec. O. Education of the Self

Exploration of three areas considered crucial to personal adjustment and growth: the self-concept, relationships and communication, and a meaningful philosophy of life. Through readings and group discussions, it is hoped that students will leave the seminar with a greater understanding and acceptance of self and others.

Sec. P. The Human Struggle Through Sport

This seminar explores the impact of sport on society and self. In it students examine the social and psychological effects on participants and consumers of sport through the study of fiction, essays, critical analysis, poetry, and film. Topics include amateurism, competition, aging, professionalism, racism, sexism, the role and impact of the media, sport and education, and the effect of sport on children.

Biology

Aims

To acquaint students with the living world around them and with basic life processes; to demonstrate the scientific method as an approach to problem solving; to cultivate an appreciation of research; to develop laboratory skill in various types of work in biology; to prepare students as teachers of biology and for professional fields such as medicine, dentistry, veterinary medicine, and for graduate schools in various biological disciplines; and to help students find and appreciate their role in the natural environment.

Requirements for Field of Concentration

Biology majors must complete the General Biology Track or the Biochemistry Track. A minimum of 48 semester hours in the department including the senior project is required. All biology majors must complete a minimum of 16 semester hours in chemistry, including two semesters of organic chemistry and eight hours of physics. German or French is recommended for those students preparing for graduate school. A semester of calculus is also strongly recommended. Statistics is recommended for students preparing for graduate work in ecology, wildlife biology, genetics and certain other fields.

The General Biology Track

Biology majors in the general biology track must complete Bio. 100, Bio. 180, Bio. 280, Bio. 290, Bio. 326, Bio. 308, Bio. 378, and Bio. 477. They must also choose four semester hours from Bio. 343, Bio. 425, and Bio. 467 and four semester hours from Bio. 440 and Bio. 442.

The Biochemistry Track

Biology majors in the biochemistry track must complete Bio. 100, Bio. 180, Bio. 280, Bio. 290, Bio. 308, Bio. 314, Bio. 320, Bio. 343, Bio. 378, Bio. 467, and Bio. 477. They should also complete eight semester hours of calculus.

Only Biology majors who have completed the following courses will be recommended for state certification to teach biology in the secondary schools: Bio. 100, 167 or 308, 180, 280, 290, 326 or 228 and 231, 343, 480; Chem. 101, 102.

See Education Department listings for required courses in professional education.

Bio. 100 Modern Concepts in Life Science

4 hours

An introduction to modern concepts of cell biology, metabolism, photosynthesis, nutrition, reproduction, heredity, evolution, behavior, and ecology, emphasizing the process of acquiring biological knowledge. Consideration is given to social and ethical implications of biological issues.

Bio. 102 Horticultural Science

2 hours

Examination of the scientific concepts on which horticulture is based. Emphasis is placed on the study of the plant, the basis of all horticultural activities.

Bio. 105 First Aid as Related to the Principles of Biology

2 hours

Major emphasis is placed on the biological principles utilized in the standard first aid and personal safety course of the American Red Cross. Red Cross certificates may be earned by those passing the examination. Opportunity for instructors' certificates will be presented as an option at the end of the course. (May be taken for credit as Physical Education 226.)

- Bio. 167 Introduction to Mammalian Anatomy and Physiology** **4 hours**
Mammalian anatomy as exemplified in the cat. Discussion and study of the functioning of the tissues and organ systems of the human body, lab study of the anatomy of the cat, the human physiology. (Not open to biology majors. May be taken for credit as Physical Education 226.) *Prerequisite: Bio. 100.*
- Bio. 180 Invertebrate Zoology** **4 hours**
A structural, functional and evolutionary study of the major invertebrate phyla.
- Bio. 205 Emergency Medical Training** **4 hours**
The medical, communication, transportation records, and report instructions required for certification by the West Virginia Department of Health as an emergency medical technician. (Red Cross advanced first aid certificate may be earned by those passing the examination.)
- Bio. 210 Evolution** **2 hours**
Evidence for the theories of evolution with special attention to the modern synthesis of genetic and ecological factors. *Prerequisite: An elementary course in biology or permission of the instructor.*
- Bio. 228 Field Botany** **2 hours**
Introduction to the taxonomy of vascular plants with emphasis on the local flora, including the techniques of herbarium science.
- Bio. 231 Ornithology** **2 hours**
Anatomy, behavior, and identification of birds.
- Bio. 250 Biological Rhythms** **2 hours**
Circadian and other rhythms are studied in living organisms including humans. An emphasis is placed on the physiological and behavioral aspects of rhythms.
- Bio. 251 Endocrinology** **2 hours**
A study of various endocrine glands and their hormonal regulation of diverse physiological functions in health and disease.
- Bio. 280 Botany** **4 hours**
A study of plant life including the evolution of the various groups of plants, the morphology and anatomy of vascular plants, and the fundamental life processes of plants.
- Bio. 290 General Genetics** **4 hours**
A synthesis of basic principles and modern molecular theory.
- Bio. 308 Comparative Vertebrate Anatomy** **4 hours**
Comparative anatomy of the representative forms of vertebrates; lab study of the comparative anatomy of the shark, other lower vertebrates, and the cat.
- Bio. 314 Introduction to Biochemistry** **4 hours**
(See Chemistry 314.)
- Bio. 320 Physical Chemistry for the Life Sciences** **2 hours**
An introduction to the nature of thermodynamics including equilibrium processes. Applications of physical concepts to systems of biological interest will be emphasized. A study of the rate processes in the liquid phase will be included. (May be taken for credit as Chem. 320) *Prerequisite: Chem. 102.*
- Bio. 326 Ecology** **4 hours**
Study of the general principles of ecology of microorganisms, plants and animals. Special emphasis is placed on field study of several communities. *Prerequisites: Bio. 100 and Bio. 101 or permission of the instructor.*
- Bio. 343 Microbiology** **4 hours**
Morphology and physiology of microorganisms; principles of lab technique; cultural characteristics and environment influences on microbial growth.
- Bio. 378 Junior Seminar** **2 hours**
The theory and practice of selected methods in biological instrumentation and research. Special emphasis is placed on those methods not covered in other courses and on methods helpful for the completion of Senior Projects.

- Bio. 425 Animal Physiology** **4 hours**
 Structure and functions of the human body; the mechanism of bodily movements, responses, reactions, and various physiological states.
- Bio. 440 Histology-Microtechniques** **4 hours**
 Structure of the cell, its modification into various tissues, and the practice of general histological techniques.
- Bio. 442 Embryology** **4 hours**
 Study of the ontogenetic development of selected embryos. Major emphasis is on the vertebrates.
- Bio. 467 Cell Physiology** **4 hours**
 Introduction to the structural organization of cells and the important aspects of cell physiology in the light of modern biochemistry and biophysics. *Prerequisites: Chem. 211-212 or permission of the instructor.*
- Bio. 477 Senior Seminar** **2 hours**
 An introduction to the literature of the biological sciences, both research papers and review articles, and the basics of scientific writing. The emphasis is on skills useful to the student who is in the process of finishing the written portion of the senior project. When possible, the student will make an oral presentation of the senior project and complete a paper or review article for publication as part of the seminar.
- Bio. 480 Methods and Materials in Teaching Physical and Life Sciences** **4 hours**
 Aims and methods of teaching the life sciences in the secondary schools. Special attention is given to teaching general laboratory procedures and to techniques of teaching. *Prerequisite: 16 hours in biology or permission of the instructor.*
- Bio. 487-488 Independent Study** **2 or 4 hours each**
- Bio. 490 Senior Project** **2-8 hours**
 Starts the first semester of the junior year and is to be completed in the spring semester of the senior year.

Chemistry

Aims

To contribute to the student's general knowledge and understanding of the nature of the physical world and his or her understanding of the place of chemistry in industrial and business life; to provide experience in the scientific method of reasoning; and to provide students concentrating in this field with a thorough and practical education in chemistry which may be useful in industrial, technical, and graduate work.

Requirements for Field of Concentration

Every student majoring in Chemistry is required to complete the following core courses: Chem. 101, 102, 211, 212, 324, 325, 490; Phys. 201, 202; Math 201, 202. In addition, every student must complete either the Professional Chemistry Track or the Biochemistry Track.

The Professional Chemistry Track

Chemistry majors in the Professional Chemistry Track must complete Chem. 320 or 322, 326, 404, four hours of electives in Chemistry; two hours selected from the following: C.S. 140, 142; Phys. 221, 222, 300; Math. 203, 341. Additional advanced courses in Mathematics are recommended.

The Biochemistry Track

Chemistry majors in the biochemistry Track must complete Chem. 314, 320, 467; Bio. 290, 343. At least four hours from the following courses are recommended: Bio. 100, 280, 308, 440, 442; C. S. 140 or 142; Math. 281.

Students who plan to do graduate work in chemistry should develop a reading knowledge of chemical German, French, or Russian. Additional courses in mathematics are also strongly recommended. All courses in chemistry as well as the indicated courses in mathematics and physics must be taken for a letter grade.

The program of study is consistent with the most recent standards of the American Chemical Society.

The entering freshmen who is interested in chemistry should select Chemistry 101 and mathematics at the appropriate level. Programs for subsequent semesters must be decided in conference with the faculty advisors for chemistry. Students with Advanced Placement (AP) in chemistry from high school should consult immediately with a faculty member in Chemistry for placement in a course at the appropriate level.

Only students who have completed the following courses or their equivalents will be recommended for state certification to teach Chemistry in secondary school: Chem. 101, 102, 211, 212, 314, 320 or 322, Physics 201, 202, G.S. 480, and six hours selected from Chem. 324, 325, 326, 404, and 414. See Education Department listings for required courses in Professional Education.

Chem. 100 Consumer Chemistry **4 hours**

A course emphasizing an understanding of chemical concepts relevant to our everyday lives. At the end of this course, a student should be able to analyze and discuss magazine and newspaper articles dealing with the subjects related to chemistry. *This course is designed for non-science students.* (May be taken for credit as G.S. 100.)

Chem. 101 General Chemistry **4 hours**

Study of theoretical and descriptive inorganic chemistry. The laboratories provide students with experience in basic laboratory manipulations, problem solving and testing of hypotheses. Three lectures and three hours of lab per week. *Prerequisites:* Two units of high school algebra or concurrent enrollment in Math. 103.

Chem. 102 General Chemistry **4 hours**

Continuation of the lecture portion of Chem. 101. Study of solubility and acid-base phenomena in aqueous systems with appropriate lab work. *Prerequisite:* Chem. 101.

Chem. 211-212 Organic Chemistry **4 hours each**

Introduction to the study of the organic compounds of carbon, both aliphatic and aromatic, involving a considerable amount of the electronic mechanisms of organic reactions. Lab work consists largely of organic preparations. (Three lectures and three hours of lab per week.) *Prerequisites:* Chem. 101, 102.

Chem. 311 Bonding and Symmetry in Organic Chemistry **2 hours**

Introduction to group theory and simple molecular orbital calculations as they apply to organic chemistry and to the spectra of organic compounds. Emphasis is placed on problem solving and structural determinations from spectroscopic data. *Prerequisite:* Chem. 322 or permission of the instructor.

Chem. 314 Biochemistry **4 hours**

The chemistry of fundamental biological reactions with an emphasis on structure-function relationships, metabolic pathways, and the regulation of biochemical processes. The laboratory provides an introduction to the modern experimental techniques of biochemistry. *Prerequisite:* Chem. 212. (May be taken for credit as Bio. 314.)

Chem. 320 Physical Chemistry for the Life Sciences **4 hours**

An introduction to the nature of thermodynamics including equilibrium processes. Applications of physical concepts to systems of biological interest will be emphasized. A study of the rate processes in the liquid phase will be included. (May be taken for credit as Bio. 320.) *Prerequisite:* Chem. 102.

- Chem. 322 Physical Chemistry I** **4 hours**
Introduction to the concepts of classical thermodynamics with special emphasis on the concepts of enthalpy, entropy, and free energy. A study in chemical kinetics, especially in the liquid phase. *Prerequisite: Chem. 102, Math. 202.*
- Chem. 324 Analytical Chemistry** **4 hours**
The study of principles of acid-base, oxidation-reduction, and solubility phenomena associated with solutions. Classical and modern applications of these principles to the analysis of unknowns will be performed in the laboratory. *Prerequisite: Chem. 102.*
- Chem. 325 Chemical Instrumentation** **2 hours**
The theory and practice of selected methods in chemical instrumentation. Special emphasis will be placed on those methods not covered in other courses and on methods helpful for completion of Senior Projects.
- Chem. 326 Physical Chemistry II** **4 hours**
A study in the different energy states of atoms and molecules, statistical principles governing the distribution of particles within these states and the transitions between states. Introduction to transport processes, surface and interface problems. *Prerequisite: Chem. 102, Math. 202.*
- Chem. 404 Advanced Inorganic Chemistry** **4 hours**
A systematic discussion of the important phenomena of modern inorganic chemistry to include bonding and structure, kinetics, thermodynamics, acid-base theories and physical methods. Transition metal and organometallic chemistry are examined along with the chemistry of selected representative elements. (Three lectures and three hours of lab per week.) *Prerequisites: Chem. 326.*
- Chem. 411 Physical Organic Chemistry** **2 hours**
Study of the theories and techniques relating structure and properties of organic compounds. *Prerequisites: Chem. 212; Chem. 322 or permission of the instructor.*
- Chem. 414 Advanced Organic Chemistry** **2 hours**
Study of selected advanced topics in organic chemistry including reaction mechanisms. Lab is introduced, where appropriate, and stresses the use of instrumentation. *Prerequisites: Chem. 212; Chem. 322 or permission of the instructor.*
- Chem. 430 Special Topics** **2 hours each**
Series of three courses devoted to the consideration of advanced topics and areas of special interest in the fields of Inorganic Chemistry (430-A), Organic Chemistry (430-B), and Physical Chemistry (430-C). *Prerequisite: Permission of the instructor.*
- Chem. 467 Cell Physiology** **4 hours**
Introduction to the structural organization of cells and the important aspects of cell physiology in the light of modern biochemistry and biophysics. *Prerequisites: Chem. 211-212 or permission of the instructor.*
- Chem. 475 Polymer Science** **4 hours**
A study of the methods of synthesizing, isolating and characterizing polymers. The course includes the study of organic, inorganic and biological polymers. Laboratory will involve the characterization of electrical, optical, thermal, molecular, and mechanical properties. *Prerequisites: Chem. 212, Chem. 320 or 322, or permission of the instructor.*
- Chem. 477-478 Seminar in Chemistry** **2 hours**
Presentation of current research topics by students, faculty and visiting lecturers.
- Chem. 480 Methods and Materials in Teaching Physical & Life Sciences** **4 hours**
Aims and methods of teaching the physical and life sciences in the secondary schools. Special attention is given to teaching general laboratory procedures and techniques of teaching. Each of the departments in the physical and life sciences participates in the program. (May be taken for credit as Education 480.) *Prerequisite: 16 hours in one of the physical or life sciences or permission of the instructor.*
- Chem. 487-488 Independent Study** **2 or 4 hours each**

Chem. 490 Senior Project**2-8 hours**

During the junior year the chemistry major is introduced to the methods of employing the chemical literature, selects a topic for advanced investigation, and makes a literature search of background material as a basis for an in-depth study in this area. There is one class meeting each week for both semesters. Following this preliminary work, an investigation of a significant topic in chemistry is made by each senior under the direction of a faculty member in the department. This work culminates in a written and oral report at the end of the senior year. *Fee.* \$20.

Communications

Aims

To prepare students to work in the media or with the media by studying the fields of broadcasting, advertising, public relations, or print media; to prepare students to enter the professional world of communications through courses emphasizing communication skills and others focusing on the structure of the media and their effects and impacts on individuals, groups and cultures; to instill a sense of ethical and legal responsibility among future professional communicators.

Other students use the general communications curriculum to prepare for law, teaching, business management and other closely related fields.

Requirements for Field of Concentration

Communications 101, 201, 206, 304, 403, 420; either 204 and 303, or 261, 271, 310; either 401 or 402; either 301 or 302.

In addition, students will complete a Senior Project, take 12 hours in English courses and/or foreign language literature courses, take Philosophy 124, and achieve a proficiency in a foreign language at the 230 level.

Normally students are expected to complete the required communications courses in the following order: freshman year — 101, 206; sophomore year — 201, 204, or 261-271, 301 or 302; junior year — 303 or 310, 304, 401 or 402; senior year — 403, 420, 490.

Appropriate courses outside the department, including Core Programs, can be recommended by advisors in the Communications Department.

It is recommended that a student in the department complete one of the following voluntary tracks: Print Media — 204, 295, 303, 306; Public Relations — 302, 320, 325, 405; Advertising — 301, at least 8 hours from 383, 384, 385, 404, 406; Broadcasting — 261, 271, 310, 311, at least 2 hours from 272, 361, 371. Advisors in the department can recommend for each track 4-6 hours of additional specialized Communications electives, generally taken in the junior and senior years.

Students must have achieved at least sophomore standing for enrollment in any of the 300- and 400-level courses in the department.

Comm. 101 Introduction to Mass Communications**4 hours**

History and theory of mass communications. Role of newspapers, magazines, radio, television, books, movies, and adjunct agencies in modern society. Effects on audiences.

- Comm. 201 Beginning Reporting** 4 hours
Study and practice of basic journalistic writing skills, including grammar and sentence construction as they relate to news writing. Basic reporting skills will be emphasized. A typing speed of 35 words per minute will be required to pass this course.
- Comm. 204 Copy Editing and Layout** 4 hours
Principles and practice in editing copy for publications; includes typography, layout, design of letterpress and offset newspapers, and use of computers. *Prerequisite: Comm. 201.*
- Comm. 206 Interpersonal Communication: Public Speaking** 4 hours
Introduction to the dynamics of communication: levels of interaction between speaker and listener. Developing the use of voice and non-verbal signals; understanding oral style in language and logical argument in public speaking. Focus on the design and delivery of short speeches and on critical listening. (May be taken for credit as Fine and Applied Arts 203.)
- Comm. 220-J Caribbean Journalism** 2 hours
Study of the mass media and their impact economically, socially, politically, religiously, and educationally on the various Caribbean groups. The course deals with the media in the Virgin Islands, Puerto Rico, Cuba, Haiti, Dominican Republic, and the Caribbean Commonwealth nations. *January term only.*
- Comm. 261 Radio Production** 2 hours
Basic audio production and performance techniques for radio. Laboratory experience in the WVBC radio studios.
- Comm. 271 Basic Television Production** 2 hours
Basic video production and performance techniques, both in studio and on location. Topics include studio operations, camera operation, floor direction, remote production techniques and videotape recording technology. *Prerequisite: Comm. 261.*
- Comm. 272 Intermediate Television Production** 2 hours
Intermediate video production and performance techniques. Laboratory experiences in technical direction, program direction, video editing and script writing. Leadership skills developed through instruction on production personnel management and budgeting. *Prerequisite: Comm. 271.*
- Comm. 295 Publication Photography** 4 hours
Introduction to the knowledge, skills, and techniques needed to produce quality black-and-white photographs for publication. Course covers both visual communication techniques and basic design and aesthetic concepts. Emphasis is on learning to meet specific news and other publications' photographic requirements effectively. (Two lectures and one four-hour lab per week.) *Prerequisites: Comm. 201 and junior standing.*
- Comm. 301 Principles of Advertising** 4 hours
Study of history, philosophies and principles of advertising. Media, markets and merchandising. Role and evaluation of advertising. Stress on copy writing and layout.
- Comm. 302 Principles of Public Relations** 4 hours
Study of public relations as a process involving research, planning, communication and evaluation. Analyzing publics and influencing their opinions. History, contributions, effects, laws and ethics of the field. Development of a public relations plan for an organization.
- Comm. 303 Principles of Media Management** 4 hours
This course emphasizes management issues in mass communications organizations. Subjects covered include what media companies do, the key functions of media leaders and managers, the areas of management within media organizations, and the management perspective on legal issues and issues of social responsibility.
- Comm. 304 Law of Mass Communications** 4 hours
Study of the legal rights and limitations of the mass communications media in the United States.
- Comm. 306 Magazine Article Writing** 2 hours
Role and contributions of U.S. magazines, historically and currently. Trends in writing style, editing, production, layout, advertising, promotion, reader research, and circulation. Practice in writing three articles for a professional journal and general circulation magazines.

- Comm. 309 Advanced Reporting** **2 hours**
Continuation of and building on the skills introduced in Beginning Reporting. Emphasis on reporting techniques, development and use of news sources and writing of various types of stories. *Prerequisite: Comm. 201.*
- Comm. 310 Advanced Broadcast News Reporting** **2 hours**
A lecture-laboratory course dealing with the complexities of the electronic news gathering process. Emphasis on the use of state-of-the art technology and its effects on news content and story organization. Field trips to local stations and guest speakers from the media. Students will be required to gather and report news using the technology associated with radio, television and cable. *Prerequisites: Comm. 201, 271.*
- Comm. 311 Broadcast Management** **4 hours**
Managing the radio/television station including administration, sales, promotion and programming, with applications to network, cable and public broadcasting.
- Comm. 320 Public Relations Writing** **2 hours**
Practice in the styles of writing used in public relations, including publicity, publications copy, scripting for audio and audio/video productions and public relations advertising. *Prerequisite: Comm. 302.*
- Comm. 325 Public Relations Case Problems** **2 hours**
Application of the principles of public relations to actual and hypothetical cases. Consideration of practical, ethical and legal implications of decisions made while managing public relations operations. *Prerequisite: Comm. 302.*
- Comm. 340-345 Special Topics in Mass Communications** **2 or 4 hours**
- Comm. 350 Persuasion** **4 hours**
Concentrated study of persuasion theory. Topics include; learning theory, consistency theories, social judgment theory, motivation, the enthymeme, counterattitudinal advocacy, role-playing and inducing resistance to persuasion. *Prerequisite: Comm. 206.*
- Comm. 355 Advanced Public Speaking** **4 hours**
Focuses on specific types of speeches and rhetorical situations. Special emphasis is given to speechwriting and to the actual delivery settings for these speeches. Speeches include: introduction, nomination and acceptance, eulogy, after-dinner, impromptu, question response, sales presentation, reports, etc. *Prerequisite: Comm. 206.*
- Comm. 361 Advanced Radio Production** **2 hours**
Advanced production and performance techniques for the radio broadcaster. Laboratory experiences in the WVBC radio studios. *Prerequisite: Comm. 261.*
- Comm. 371 Advanced Television Production** **2 hours**
Integration of the technical and creative skills necessary for broadcast television production, both in studio and on location. Definition of creativity and its role in broadcast television. *Prerequisite: Comm. 272.*
- Comm. 383 Advertising Creativity** **4 hours**
Principles and practices of writing copy for the print and electronic media. *Prerequisite: Comm. 301.*
- Comm. 384 Advertising Media Buying** **2 hours**
Study of the process of developing an advertising media plan. Extensive analysis and use of audience and marketing data for the print and broadcast media. *Prerequisite: Comm. 301*
- Comm. 385 Advertising Media Selling** **2 hours**
Theory and techniques of selling print and broadcast media to advertisers. Salesmanship, including presentation techniques. *Prerequisite: Comm. 301.*
- Comm. 390 Campus Media Management** **1 hour**
The student, working as a manager for a campus media organization, will develop leadership skills under the supervision of the medium's faculty advisor. Open only to managers of the campus media as determined by faculty advisors. May be repeated once in the same organization. Maximum of four credits total. (Letter grades for Communications majors; CR/NCR for others.)

- Comm. 401 History of American Mass Communications** 4 hours
History of newspapers, magazines, books, radio and television as well as the related areas of public relations and advertising in the United States.
- Comm. 402 Public Opinion** 4 hours
The nature and significance of public opinion. Includes studies of public opinion formation and measurement, the roles of news media, advertising, censorship, propaganda, political indoctrination, and other factors.
- Comm. 403 International Communications** 2 hours
Comparative media systems: theory and practices in print and electronic media, advertising, public relations and journalism education in Europe, Asia, Latin America, the Middle East and Africa.
- Comm. 404 Direct Response Advertising** 2 hours
Study of theory and techniques of direct response advertising and promotion. Preparation of an original project and/or service of a profit or non-profit institution. *Prerequisite: Comm. 301.*
- Comm. 405 Public Relations Campaigns** 2 hours
The handling of an organization's public relations program or an organization's special public relations campaign, including researching and analyzing the public relations situation, planning the program or campaign, and developing the various communications tools to be utilized. A competitive public relations agency model is used. *Prerequisite: Comm. 320 or 325.*
- Comm. 406-407 Advertising Campaigns** 2 hours each
Development of an advertising campaign including situation analysis, strategic advertising plan and some execution of specific creative and media tactics. A competitive agency model is used. *Prerequisite: Comm. 301, 383, or 384.*
- Comm. 420 Professional Internship** 2 hours
Professionally supervised experience with an off-campus media organization or a communications agency. Assignments will allow for application of classroom materials and campus media experiences and will be similar to those experienced by new communications professionals. (Minimum of 160 hours required. Generally taken as a senior.) *Prerequisites: Two on-campus media experiences and a professional observation.* (Details about prerequisites available from the Department of Communications.)
- Comm. 487-488 Independent Study** 2 or 4 hours each
- Comm. 490 Senior Project** 2-8 hours

Communication Design

(See Fine and Applied Arts 302, 303, 304, 404, 405, and 406.)

Computer Science

Aims

To help students focus on programming as a discipline and the computer as a tool for solving problems. Students are prepared to recognize problems that can be solved with the aid of computers, to solve such problems individually and as a member of a team, and to develop their solutions through well-organized and well-documented structured programs which run efficiently. Students are also introduced to contemporary issues in the discipline and encouraged to assess how computer science relates to future employment or future formal education.

Two Plans of Concentration

Two plans of concentration are offered — one leading to the Bachelor of Arts degree and the other to the Bachelor of Science degree.

The Bachelor of Arts plan is designed for those students seeking a career in computer science in a business environment.

The Bachelor of Science plan is designed for students seeking a career in computer science in a scientific lab or in a software development firm.

Requirements for the Bachelor of Arts Degree

The Bachelor of Arts degree requires Computer Science 144, 201, 202, 290, 370, 380, 478, 490; Mathematics 201, 281; Accounting 211, 212, 220; Economics and Business 312; English 209. Strongly recommended are Computer Science 280; Economics and Business 200, 280; Accounting 425. Other recommended courses include Communications 206, 301, 302; General Science 210; Philosophy 124. Beginning students are expected to complete Computer Science 201 and Mathematics 201 during the first semester.

Requirements for the Bachelor of Science Degree

The Bachelor of Science degree requires Computer Science 201, 202, 280, 290, 330, 370, 380, 478, 490; Mathematics 201, 202, 354, 383; Physics 201, 202. Beginning students are expected to complete Computer Science 201 and Mathematics 201 during the first semester.

CS 140-150 Introduction to Programming **2-4 hours each**

The following courses provide an introduction to computers by programming in a high level language on the Prime computer. The emphasis is programming real-life problems using efficient coding techniques. These courses are directed towards the student who wants to use the computer as a problem-solving tool.

CS 140 Introduction to Programming Using BASIC **2 hours**

This course is directed toward the non-science student. Not recommended for students who have successfully completed any other computer language course.

CS 142 Introduction to Programming Using FORTRAN **2 hours**

The programming assignments in this course will involve applications to science problems.

CS 143 Introduction to Programming Using PL 1 **4 hours**

Programming assignments in this course will involve applications to science problems.

- CS 144 Introduction to Programming Using COBOL** **4 hours**
 Programming assignments in this course will involve applications to business problems.
- CS 145 Introduction to Programming Using RPG II** **2 hours**
 Programming assignments in this course will involve applications to business problems.
- CS 150 Programming for Science Applications** **4 hours**
 This course will teach methods of structured programming and will use both FORTRAN 77 and PASCAL as computer languages. All programming will involve scientific applications. *Prerequisite: Permission of instructor.*
- CS 200 Computer Applications in the Social Sciences** **2 hours**
 A study of computer techniques applied to social and behavioral sciences. Topics include language selections, matrix manipulation, statistics (basic), analysis of variance, correlations and regression, econometrics, and profit analysis packages.
- CS 201 Computer Science I** **4 hours**
 This beginning course for computer science majors may also be taken by others who wish to learn PASCAL. The emphasis is on techniques of algorithm development, structured programming and debugging techniques as they apply to the PASCAL language.
- CS 202 Computer Science II** **4 hours**
 An introduction to operating systems, data structures and computer organization and files. The data base management system INFO by Henco will also be discussed. The programming assignments will provide the students with advanced features of PASCAL and an introduction to PL 1, another structured language. *Prerequisite: CS 150 or CS 201.*
- CS 222 Digital Electronics** **4 hours**
 An introduction to digital electronics with applications in instrumentation and computer electronics. Topics include Boolean Algebra, basic gates, logic families, encoders-decoders, astable/monostable multivibrators, flip-flops, counters, readouts, shift registers, bi-directional bus structure, serial-parallel/parallel-serial data conversion, D to A and A to D conversion. (Three hours of lecture and two hours of lab each week. May be taken for credit as Physics 222.) *Prerequisite: Math. 103 or equivalent or permission of the head of the department.*
- CS 280 Assembly Language** **4 hours**
 A study of Assembly language programming methods. Topics include computer organization, Assembly process, Assembly coding, addressing, binary arithmetic, storage allocation, character and bit manipulation, and debugging techniques. *Prerequisite: CS 202.*
- CS 290 Data Structures** **4 hours**
 Basic data concepts and their representation. Linear lists, strings and string processing, algorithms, and arrays. Storage allocation and representation of arrays. Storage systems and structure, and storage allocation and collection. *Prerequisite: CS 202.*
- CS 310 Discrete Structures** **4 hours**
 Fundamental algebraic, logical, and combinatorial concepts of computer science. Topics include graph theory, monoids and finite automata, lattices and Boolean algebras.
- CS 330 Computer Organization** **4 hours**
 Application of Boolean algebra to combinational circuit design problems. Organization of simplified computer components. Adders, arithmetic and logical units, memory organization. Architecture and physical realization of computer systems. *Prerequisite: CS 202.*
- CS 370 Operating Systems** **4 hours**
 Batch processing systems. Implementation techniques for parallel processing of input/output and interrupt handling. Memory management, system accounting, interprocess communication and interfaces, and deadlocks. *Prerequisite: CS 280.*
- CS 380 Introduction to Data Base Design** **4 hours**
 This course presents an in-depth study of the design and the implementation of a data base. Topics include architecture of a data base, the three approaches (relational, network, and hierarchical) to a data base. Also included is some experience with INFO, a relational data base package by Henco. *Prerequisite: CS 290.*

- CS 390 Numerical Analysis** **4 hours**
 Numerical methods in evaluating integrals and differential equations. Techniques in finding the roots of polynomials and solving systems of linear equations and matrix manipulation. (May be taken for credit as Math. 390.) *Prerequisites: CS 142, 143, or 201 and Math. 201, 202.*
- CS 400 Interactive Computer Graphics** **4 hours**
 A study of graphics on the microcomputer using Turtle Graphics and the UCSD PASCAL. *Prerequisite: One high level language other than BASIC.*
- CS 410 Computer Simulation** **2 hours**
 Simulation methodology including generation of random numbers and variates, analysis of data generated by simulation experiments, and validation of simulation models. Introduction to queuing theory. Selected simulation applications. *Prerequisite: Math. 383.*
- CS 450 Data Base Concepts** **2 hours**
 Introduction to the concept of a data base. Topics include data organization and structure data security. Also discussed will be a comparison of data base approaches and access methods. Some programming assignments will be given in INFO, the data base management system on our PRIME. *Prerequisite: CS 202.*
- CS 460 Programming Language Structures** **4 hours**
 This is a course in programming language constructs emphasizing the run-time behavior of programs. Topics include: formal grammars, parsing, information binding, data storage, global and local variables and parameters, string handling and list processing. *Prerequisite: CS 202.*
- CS 478 Senior Seminar** **2 hours**
 Current topics in computer science.
- CS 482 Computers in Education** **2 hours**
 Students will become familiar with the microcomputers and some software available for classroom use. Methods for evaluating software will be discussed. Students will design classroom applications using LOGO or some other software package. *Prerequisite: Permission of Instructor.*
- CS 487/8 Independent Study** **2 or 4 hours**
- CS 490 Senior Project** **2-8 hours**

Economics & Business

Aims

The Department of Economics and Business offers two majors: Economics & Business and Accounting. Both majors are based in the liberal arts and emphasize the application of techniques drawn from economics and mathematics to business problem solving. The department's courses cultivate the ability to apply knowledge and to develop proficiency in the use of analytical tools for decision making in business, government, and society. The majors and courses serve as preparation for work in business, government, law, public service, and graduate study.

Requirements for Field of Concentration

All majors in the department are required to complete the following courses: Econ. 200, 301, 302; Acct. 211, 212, 220; and Mathematics 201, 281, 282. Students considering

majoring in the department should complete all of the 200-number courses listed above by the end of their sophomore year.

In addition to the courses required of all departmental majors, students majoring in Economics and Business are required to complete Econ. 280, 290, 312, 477 and a Senior Project in Economics and Business. Students with a major in Economics and Business are limited to 12 hours in Accounting beyond the required courses (Acct. 211, 212, and 220).

In addition to the courses required of all departmental majors, students majoring in Accounting are required to complete Acct. 312, 313, 314, 425, 435, 378, and a Senior Project in Accounting. Students with a major in Accounting are limited to 12 hours in Economics and Business beyond the required courses (Econ. 200, 301, and 302).

Students majoring in the Department of Economics and Business are expected to attain a minimum grade of “C” in all required courses in the program. If a student receives a grade lower than a “C”, the student must arrange an interview with the head of the department prior to taking additional upper-level courses.

Economics & Business

Econ. 101 Personal Finance **4 hours**
This course aims to develop an understanding of the concepts needed for intelligent consumer decision-making. The course covers budget policies, borrowing, installment buying, marketing techniques, and consumer purchases in the areas of food, clothing, automobiles, housing, social insurance, personal insurance, pension programs, investment markets, and estate building. *(Not recommended for students with a major in the Department of Economics and Business. Offered every third year.)*

Econ. 111 Introduction to Business **2 hours**
An introduction to the department’s programs. The course will explore the structure, procedures, and objectives of the contemporary American business community. Attention will be paid to the economic and social environment of business and to the role of business institutions in our culture. *(Not recommended for students who have previously taken other courses in the department.)*

Econ. 200 Principles of Economics **4 hours**
An examination of the fundamental concepts, principles, and problems of modern economics. Alternative methods of settling economic questions will be explored with special emphasis on the functioning of the market system. Topics covered will include the institutions of capitalism, basic economic laws, rationing problems, income distribution, business structures, the labor movement, the role of government, national income accounting, business cycles, banking and monetary policy, Keynesian analysis and fiscal policy, and concepts of international trade.

Econ. 280 Managerial Economics **4 hours**
Managerial economics is a study of profit-maximizing managerial decision-making with emphasis on the external environment of the firm. The course will introduce students to quantitative techniques of decision-making. *Prerequisite: Econ. 200*

Econ. 286 Personnel Management **4 hours**
A course dealing with personnel management as a dynamic network of processes, systems, and conditions that affect all organizations and the people in them. In particular, the course presents the application of theory, research, and practice to job design, staffing, training and development, appraisal compensation, leadership, organizational justice, and collective bargaining. *Prerequisite: Econ. 200. (Offered every third year.)*

Econ. 287 Organizations and Human Behavior **4 hours**
Organizations and Human Behavior seeks to improve the effectiveness of organizations by strengthening human processes. The course explores specific aspects of organization culture such as motivation, conflict, power, and leadership. Exercises and simulations are emphasized. *(May be taken for credit as Psychology 287.)*

- Econ. 290 Principles of Marketing** **4 hours**
Principles of Marketing is designed to introduce the student to fundamental concepts that will help improve marketing decision making. The student will be introduced to the language of marketing, as well as the concepts of marketing strategy and planning, product development, channel decision, promotional strategies, and pricing. *Prerequisite: Econ. 200.*
- Econ. 300 Business and Society** **4 hours**
Business and Society explores the interface of business with government and society. The course explores management action in situations involving significant political and social factors. *Open only to juniors and seniors.*
- Econ. 301 Intermediate Price Theory** **4 hours**
An intermediate level study of resource allocation, price determination, output determination, and income distribution at the micro level under various market conditions. Mathematical analysis and model building will be used whenever appropriate. *Prerequisites: Econ. 200, Math. 201, 281.*
- Econ. 302 Intermediate Macroeconomic Theory** **4 hours**
A study of the determinants and the behavior of the national economy, including consideration of production, employment, and price levels. Mathematical analysis and model building will be used whenever appropriate. *Prerequisite: Econ. 200.*
- Econ. 312 Managerial Finance** **4 hours**
An exploration of corporate organizations and the planning of financial requirements. The course includes an intensive study of cash flow, budgeting, capital decisions, internal financing, and corporate reorganization. *Prerequisites: Acct. 211, 212, and 220.* (May be taken for credit as Acct. 312.)
- Econ. 316 Money, Banking, and Fiscal Policy** **4 hours**
A study of the behavior of various money markets and the operation of commercial banks, the Federal Reserve System, and the Treasury Department, including an analysis of tax revenues, expenditures, and debt-financing. *Prerequisite: Acct. 212.* (Offered alternate years.)
- Econ. 325 Investment Management** **4 hours**
Investment management is a critical study of the various types of investment instruments and the relative merits of each. In addition, the course explores investment procedures, security analysis, security rating, portfolio theories, and portfolio analysis. *Prerequisites: Econ. 200, Acct. 212, and Math. 281.* (Offered alternate years.)
- Econ. 330 Business Law** **4 hours**
An introduction to the nature and development of law with particular emphasis on the legal aspects of contracts and other business instruments as set forth in the Uniform Commercial Code. In addition, some of the legal aspects of partnerships and corporations will be presented. (May be taken for credit as Acct. 330.)
- Econ. 341 Labor Problems** **4 hours**
A general course in labor economics with an emphasis on trade unionism. Attention will be paid to the history and objectives of organized labor, employment and wage theory, managerial labor practices, collective bargaining, current economic and political aspects of labor management, and labor law. *Prerequisite: Econ. 200.* (Offered alternate years.)
- Econ. 346 Industrial Organization** **4 hours**
A study of the structure, conduct, and performance of modern American industry. The course emphasizes those factors which account for the decline of large-scale manufacturing enterprises and the emergence of smaller enterprises and more competitive industrial markets. *Prerequisites: Econ. 200 and Math. 281.* (Offered alternate years.)
- Econ. 350 Business Cycles and Forecasting** **4 hours**
Business Cycles and Forecasting explores economic fluctuations in the modern American economy against the backdrop of the alternative theories utilized to explain these fluctuations. Students in the course will be exposed to the quantitative data which describes the cycles and the analytical techniques which are utilized to generate economic forecasts. *Prerequisites: Econ. 200 and Math. 281.* (Offered alternate years.)

- Econ. 360**

International Trade and Transnational Marketing

4 hours
- An examination of the principles of international trade and finance and their application to the modern world. Special emphasis is placed on the following topics: exchange rates, theories of comparative advantage, tariffs, quotas, commercial policy, capital movements, reciprocal effects of changes in micro and macro economic policies, the role of international organizations, and aid to less developed countries. Other topics covered in the course include issues involving transnational marketing strategies, problems, and issues. *Prerequisite: Econ. 200.*
- Econ. 399**

Problems in Business Administration

2 or 4 hours
- An exploration of selected management problems related to the total enterprise and emerging technostucture. The course also covers managerial and corporate strategy, utilization of resources, and the functional disciplines of management. *Prerequisite: Econ. 200 and permission of the instructor.*
- Econ. 470**

Internship in Management

4-8 hours
- Internship in Management provides students with an extensive off-campus learning experience in a management setting. The internship involves off-campus work and a substantive written project. Approval by the department of both the work experience and the academic project is required. The internship must be jointly supervised and evaluated by a member of the faculty and an approved off-campus mentor.
- Econ. 477**

Senior Seminar

2 hours
- The Senior Seminar in Economics is a capstone course integrating the student's background and previous courses in economics and business through case studies and simulation exercises.
- Econs. 487-488**

Independent Study

2 or 4 hours each
- Econ. 490**

Senior Project

2 hours
- The Senior Project is open only to students majoring in Economics and Business. Students will prepare and present a senior project. The topic for the senior project should be selected before the end of the junior year and must be approved by the head of the department.

Accounting

- Acct. 211**

Principles of Accounting I

4 hours
- An introduction to the principles and procedures accountants use to process financial information and to present income statements and statements of financial position to external users of the organizations' financial information. Students will study the accounting system's methods of collecting, analyzing, measuring, recording, processing, and finally presenting financial information.
- Acct. 212**

Principles of Accounting II

2 hours
- A continuation of the study of accounting principles and procedures begun in Accounting 211. *Pre-requisite: Acct. 211.*
- Acct. 220**

Microcomputer Applications in Accounting

2 hours
- This course introduces students to financial analysis on personal computers including the common command sets, the design and use of spreadsheets, macros, and the design and manipulation of microcomputer based data bases.
- Acct. 312**

Managerial Finance

4 hours
- An exploration of corporate organizations and the planning of financial requirements. The course includes an intensive study of cash flow, budgeting, capital decisions, internal financing, and corporate reorganization. *Prerequisites: Acct. 211, 212, and 220.* (May be taken for credit as Econ. 312.)
- Acct. 313**

Intermediate Accounting I

4 hours
- A presentation of the theoretical foundation of accounting concepts and principles. The course provides an extensive study of the accounting process with emphasis on accounting for cash and temporary investment, receivables, inventories, plant assets, and long-term investments. *Pre-requisite: Acct. 212.*

- Acct. 314 Intermediate Accounting II** **4 hours**
A continuation of Acct. 313 with emphasis on accounting for liabilities, notes, leases, pensions, and owner's equity. Attention is given to special problems in income determination, income taxes, earnings per share, and changing prices. The course concludes with financial statement analysis. *Prerequisite: Acct. 313.*
- Acct. 330 Business Law** **4 hours**
An introduction to the nature and development of law with particular emphasis on the legal aspect of contracts and other business instruments as set forth in the Uniform Commercial Code. In addition some of the legal aspects of partnerships and corporations will be presented. (May be taken for credit as Econ. 330.)
- Acct. 352 Accounting for Not-for-Profit Organizations** **4 hours**
A study of accounting systems used to process the financial information of economic organizations not having profit as their primary goal. Students will work on budget preparation and uses and the integration of budgets into the accounting model of assets equalling equities and debits equalling credits. *Prerequisite: Acct. 212.* (Offered alternate years.)
- Acct. 425 Cost Accumulation and Control** **4 hours**
Together with the intermediate accounting sequence this course provides a solid foundation in accounting. A study of cost accumulation systems, job order and process, cost controls, flexible budgets and standard costs, and cost, volume, profit relationships. *Prerequisites: Acct. 212 and either Acct. 314 or permission of the instructor.*
- Acct. 435 Advanced Accounting** **4 hours**
Advanced accounting introduces the student to accounting concepts concerning partnership organization and liquidation, branch accounting, consolidated financial statements, bankruptcy and corporate reorganization, and financial reporting by multinational companies. *Prerequisite: Acct. 314.*
- Acct. 441 Federal Income Taxation of Individuals** **4 hours**
A study of federal income tax law and implementing Treasury Department regulations and procedures governing federal taxation of individuals. Provides a general knowledge of federal individual income taxation rather than specific instructions in completing individual federal tax returns. *Prerequisite: Acct. 212 or permission of the instructor.*
- Acct. 478 Senior Seminar in Auditing** **4 hours**
A capstone course integrating previous work in accounting. Students will be introduced to accounting concepts concerning the fairness of an organization's financial statements, generally accepted auditing standards, auditor's opinions, internal control and auditor's ethical, legal, and professional responsibilities. Emphasis is placed on case analysis requiring managerial responses to specific accounting problems. *Prerequisites: Acct. 425 and 435.*
- Acct. 490 Senior Project** **2-8 hours**
Open only to students with a major in accounting. Students will prepare and present a senior project. *The topic for the senior project must be approved by the Head of the Department of Economics and Business.*

Education

Aims

To develop a teacher who is a self-directed decision maker who recognizes the need for personal and professional growth, has the skills necessary to pursue it, and is secure enough to engage in personal and professional self-evaluation.

To develop a teacher who can recognize the needs of young people and utilize the liberal arts background, content preparation, and the principles of education in attempting to meet those needs and facilitates the acquisition of knowledge for that purpose; a teacher who can provide an educational environment to enhance the development (social, emotional, cognitive and physical) of individuals so that they may make sense of their world and make decisions effectively within that world.

To develop a teacher who can interact effectively within the community and school environment and has the skill and willingness to communicate with people of all ages and backgrounds.

To develop a teacher who also analyzes emerging trends and thinks critically about them in an attempt to arrive at a human balance between the needs of the child, the needs of society, and personal needs in order to perform effectively and ethically.

In summary, to develop a teacher who is a perceptive and aware person who can utilize intellectual skills and knowledge to think critically and pursue self-directed goals.

Requirements for Teacher Certification

A student preparing for certification must plan to complete: (1) the requirements for graduation as described on Page 14, (2) the testing program required by the West Virginia Board of Education in the areas of reading, mathematics, writing, speaking and listening, (3) a selection of courses providing appropriate background for teaching in a particular field, (4) a sequence of professional education courses and experiences designed to give broad understanding of concepts and skills in teaching.

Bethany is accredited by the National Council for the Accreditation of Teacher Education (NCATE) and is a party to the interstate compact for reciprocity in certification through the West Virginia Board of Education approval of all certification programs offered at Bethany College.

To become eligible for teacher certification, the student must complete a College and state-approved program. It is the student's responsibility to seek appropriate counseling from the Education Department, preferably early in the freshman year, and to become familiar with all of the requirements. *A Guide to Teacher Education*, available in the Education Department Office, gives a full description of all programs.

The department recognizes abilities which students may already have in a given subject matter area and assists them in planning their program accordingly. Waivers or advanced standing granted by the College can be noted on official transcripts so that courses from which a student is exempted may be applied toward certification.

Leadership of children and youth groups, summer camps, scouts, church school, playground supervision, etc., is strongly recommended.

A period of observation and participation in a school is an important and integral part of the education curriculum. Education students are encouraged to consider observation

and participation in an educational agency when planning their intercultural and/or citizenship practicum.

Professional Education

Students preparing to teach at any level must complete the sequence of required professional courses. Required courses cannot be taken credit-no credit.

First Semester	Credit	Second Semester	Credit
Freshman			
Psych. 100 General Psychology	4		
Sophomore			
Ed. 201 Human Development I	4	Ed. 202 Human Development II	4
		Ed. 242 Principles and Curriculum in the Public Schools	2
(Students must apply for admission to Teacher Education during Ed. 242)			
Junior			
Appropriate methods course(s)	2-4	Ed. 348 Professional Practicum	4
		Appropriate methods course(s)	2-4
(Students must apply for the Professional Year during Ed. 348)			
Senior Professional Block			
Sp. Ed./Psych. 410		Ed. 340 Reading	
Test and Measurements	2	in the Content Areas	2
Ed./Sp. Ed. 470 Observation and Directed Teaching	8		
Ed. 401 History and Philosophy of Education	2		
Appropriate methods seminar(s)	4		
No Other Courses Permitted			

Elementary Education (K-8)

A student seeking certification to teach in the elementary school must follow the course of study for MULTI-SUBJECTS K—4 and 5—8. This allows the student to teach in the self-contained classroom. In addition to the Professional Education requirements listed, the student must take related, required courses. A complete listing of these courses is available from the Education Department and is contained in the *Guide to Teacher Education* (available from the department).

Students preparing to teach should discuss their program with the Head of the Education Department. Students are encouraged to pay special attention to Perspectives course choices. A Middle Childhood Specialization may be added to the elementary certificate if all requirements for both levels are met. Specific Learning Disabilities certification is also available to the student who wishes to teach in special education (see below).

The *Guide to Teacher Education*, available in the Education Department office, has specific information about required and related course work.

Specific Learning Disabilities (K—8)

Certification for teaching the child with specific learning disabilities is available as a specialization for the elementary certificate. Students who are interested in this area

of special education must take the required special education courses in addition to the multi-subjects and professional education courses. Further information is available from the Education Department and is contained in the *Guide to Teacher Education*.

Middle Childhood Education (5–8)

Students preparing to teach in middle childhood settings (Middle School and Junior High School) will follow the Professional Education Sequence listed. They must choose two teaching fields from: Mathematics, Language Arts, Social Studies, General Science, French, German, Spanish, and Physical Education.

Students preparing to teach at the middle childhood level should discuss their program with the Head of the Education Department. Two teaching fields are required for a degree in education and certification in West Virginia. Middle Childhood certification may be added to elementary or secondary certification with the advisement and permission of the Education Department. A *Guide to Teacher Education* gives a full description of all programs leading to certification in West Virginia. The *Guide* is available in the Education Department.

Each student is responsible for planning a program for meeting certification requirements.

Secondary Education

Students preparing to teach in secondary schools are expected to follow the sequence of required education courses listed in the Professional Education sequence. General distribution and other requirements for graduation, and the student's field of concentration, must be added. The required education courses cannot be taken Credit-No Credit.

Students preparing to teach at the secondary level should discuss their program with the Head of the Education Department, as well as the person responsible for the Teacher Education Program in the major field. Students interested in French, German, Spanish, Mathematics, English, Social Studies, General Science and Physical Education must complete the Middle Childhood (5–8) program in their field. Physical Education candidates may plan for K–12 certification. A *Guide to Teacher Education* gives the full description of all programs leading to certification in West Virginia. The *Guide* is available in the Education Department.

Teaching fields include: Biology, Chemistry, Physics, General Science, French, German, Spanish, English, Physical Education, Social Studies.

Education (Non-School Settings)

The Education Department provides for a field of concentration, without public school certification, to allow students to prepare for a variety of roles in non-school settings, such as 1) training program development and implementation in business and industry, 2) policy planning roles in state and federal agencies, and 3) higher education instruction in foundation areas.

Courses required are Sp. Ed. 410; Education 201, 202, 242, 302, 348, 401, 475, 476, and 490.

In addition, each student will propose a program of study in one of the following areas of specialization: Human Resources Management and Training, Education Policy Planning, Educational Foundations, or other identified pre-professional areas of study within the discipline. Courses will be determined through the development of a program proposal based upon the student's career and study goals.

Psychology/Education Interdisciplinary Program

The Education Department and the Psychology Department offer an Interdisciplinary Degree for students interested in preparing for school and child related careers. Information concerning this program can be obtained from the Education Department or the Psychology Department.

Admission to Teacher Education

During Education 242 (Principles and Curriculum in the Public Schools), written application for admission to teacher education should be submitted to the Education Department on forms obtained from the department office.

The following criteria must be met to be admitted to the program:

1. Quantitative Skills Test
(given to entering freshmen and may be retaken): 90 percent.
2. Nelson-Denny Reading Test
(given to entering freshmen and may be retaken): 12.0 grade equivalent.
3. Grade Point Average: 2.25 overall, in education, and in proposed field of study.
4. Two positive recommendations from faculty and/or staff of Bethany College.
5. Positive recommendation by Education Department.

The student may be granted full admission, provisional admission, or may be denied admission. Appeal of the decision can be made through the Director of Teacher Preparation Programs to the Educational Personnel Preparation Advisory Committee. A full description of criteria and procedures can be found in the *Guide to Teacher Education*.

Retention

A student must maintain the required level of performance and must show continued professional behavior. A student's qualifications may be reviewed at the end of any semester if such a review is deemed necessary.

Admission to the Professional Year

During Education 348 (Professional Practicum), each student must apply for admission to the professional year which includes student teaching. The following criteria must be met:

1. Successful scores on the Preprofessional Skills Test
(reading, mathematics, writing).
2. Successful completion of the speaking activities on ACT-Comp.
3. Successful completion of the Listening Test.
4. Grade point Average: 2.50 overall, in education and in the field(s) of study.
5. Positive recommendations from the department in which the student is seeking certification.
6. Positive recommendation from the Education Department.
7. All appropriate prerequisite courses must have been successfully completed.

The student may be granted full admission, provisional admission, or may be denied admission. Appeal of the decision can be made through the Director of Teacher Preparation Programs to the Educational Personnel Preparation Advisory Committee. A full description of criteria and procedures can be found in the *Guide to Teacher Education*.

Application for Certification

Following completion of student teaching and near the completion of the program, each student should initiate application procedures for certification. The following criteria must be met for certification in West Virginia:

1. Grade Point Average: 2.50 overall, in education, and in the area(s) of certification.
2. Successful completion of the West Virginia Board of Education Subject Area competency examination.
3. Successful completion of the Comprehensive Examination in area of concentration and in Education (Secondary Certification candidates should see the Head of the Education Department).
4. Successful completion of student teaching and all required course work.
5. Recommendations from the Education Department and from the student's area of certification.
6. All requirements for the initial degree must be met.

Note: Graduation from Bethany College does not guarantee certification in the state of West Virginia. The student must meet all the criteria for certification as determined by the College and by the West Virginia Board of Education.

All required testing can be arranged through the Education Department at the appropriate times in the student's career at Bethany College.

The student may be recommended for full certification at the initial level, or may be eligible for a temporary permit. A student who fails to meet criteria may be denied recommendation. Appeal of the decision can be made through the Director of Teacher Preparation Programs to the Educational Personnel Preparation Advisory Committee. A full description of criteria and procedures can be found in the *Guide to Teacher Education*.

Competency-Based Professional Block — Student teaching is conducted for the entire first semester of the senior year in area schools or off-campus centers. Related course work is integrated with student teaching to provide direct application to field experience. Students assigned to off-campus centers may need to live in the community where the center is located. The College will assist in locating housing if desired, and with other details of the arrangement.

Students are not permitted to schedule courses in conflict with the block during the semester they are enrolled in it, or carry extra-curricular activities which interfere with the requirements imposed by the block. Arrangements can usually be made for practice and participation in varsity sports. Any exceptions to the above must be approved by the head of the department concerned and by the Dean of the Faculty. Students should *not* register for other than the prescribed Professional Block courses without written permission from the Education Department.

Ed. 100 Developmental Studies: Reading **2 hours**
Designed to provide basic instruction in reading and comprehension skills. Emphasis will be placed upon the specific areas of word recognition, vocabulary, comprehension and study skills. The Special Advising Program section will use the Strategies Intervention Model and the Learning Strategies Curriculum. (Permission of the instructor. Offered only as credit/no credit.)

Ed. 105 Developmental Studies: Mathematics **2 hours**
Designed to provide developmental mathematics instruction for the college student who wishes to improve his/her abilities in mathematics. Emphasis will be placed upon conceptual understanding of basic mathematics with corresponding computational skill development. (Offered only as credit/no credit. Does not fulfill Quantitative Reasoning perspective requirement.)

- Ed. 110 Developmental Studies: Writing** **2 hours**
Designed to provide instruction and practice in basic composition for freshmen. Emphasis will be placed on organization, mechanics, and clarity. The Special Advising Program section will use the Strategies Intervention Model and the Learning Strategies Curriculum. (Permission of the instructor. Offered only as credit/no credit. Does not fulfill the Writing Proficiency Requirement.)
- Ed. 201 Human Development I** **4 hours**
Individual and group development from infancy to adolescence. Observation and first-hand contacts with children are included. Educational programs are considered in terms of the total child development. *Freshmen not admitted.* (May be taken for credit as Social Work 201.)
- Ed. 202 Human Development II** **4 hours**
Individual and group development from adolescence through senescence. Applications are made in relation to learning theory, self-understanding, and preparation for working with young people. *Freshmen not admitted.* (May be taken for credit as Social Work 202.)
- Ed. 242 Principles and Curriculum of the Public School** **2 hours**
Introductory course in which students explore the goals of education and their implementation; the role of the teacher and professional concerns while applying the concepts of human development.
- Ed. 275 Student Development in Higher Education** **2 hours**
Study of the philosophy of higher education and the development of the individual student within the college environment. Emphasis is placed upon personal growth, communication skills, group dynamics, and residence hall programming. Didactic and experiential learning in the areas of personal, academic and vocational counseling is included. (Enrollment limited to Resident Advisors. May be taken for credit as Psychology 275.)
- Ed. 289 Children's Literature** **2 hours**
Includes background of the history of literature for children; familiarity with established and current literature in this area; critical analysis skills; methods and techniques of using literature; work with children. (May be taken for credit as English 289.)
- Ed. 290 Literature and Adolescence** **2 hours**
Study of important works about or of special interest to young people of junior high school through high school age. Techniques of presenting the works are considered. Readings are primarily in short stories and novels. Required for students preparing to teach secondary school English. (May be taken for credit as English 290.)
- Ed. 300-309 Issues in Education**
Courses focusing on special topics in Education for majors and non-majors.
- Ed. 300 Juveniles, Law and School** **4 hours**
A review of the social and legal status of juveniles to 1899, through the Warren Court and today. Law libraries, Supreme Court decisions, juvenile authorities, detention centers, school and college authorities will provide applications for the basic concept of justice as it applies to juveniles in this country.
- Ed. 301 Educational Ethnography: Field Based Research in the Schools** **4 hours**
This course will investigate the process of constructing, through direct observation, a theory of the working of a particular culture (i.e., schools). Students will study the theoretical base, rationale and methodology used in collecting and analyzing data by means of an ethnographic approach.
- Ed. 302 School and Society** **4 hours**
A study of the role of schools in a society, of the school as a formal and informal organization, and of the function of schooling. The course will utilize the methodologies of the disciplines of education, sociology, and other social sciences. Case studies and on-site observations combine with a variety of readings to provide a wide range of viewpoints for students to evaluate. (May be taken for credit as Sociology 302.)
- Ed. 328 Human Sexuality** **2 hours**
Examination of the various psychological, biological, social, comparative, legal, and ethical

aspects of human sexuality. In addition to sexual anatomy, physiology, birth control, and sexually transmitted disease, the course takes up current issues such as a sex-role development, and sex therapy. (May be taken for credit as Psychology 328.)

Ed. 340 Teaching Reading in the Content Areas **2 hours**
This course will focus on diagnostic and prescriptive teaching techniques. Both the corrective techniques for the remedial reader and the higher order cognitive skills will be included. In addition to classwork this course includes two hours weekly of tutoring middle school, secondary, or college students who have been recommended by their advisors for help in reading. *Prerequisite: Ed. 348.*

Ed. 344 Teaching Skills Laboratory **Non-credit**
Study and practice of specific teaching skills related to the technical and media areas of education. Students must complete the required work prior to student teaching. Information related to the course work is available from the Education Department office. Elementary and secondary.

Ed. 345 Methods and Content in Elementary and Middle Childhood I: Mathematics **4 hours**
Practical application of arithmetical skills, including the understanding of fundamental processes; comparison of different philosophies in teaching arithmetic; the elements of modern math; and the theoretical and practical application of the metric system at all levels of the curriculum. Classroom experience in public schools. *Prerequisites: Math 250 or permission of the instructor, Ed. 242.*

Ed. 346 Methods and Content in Elementary and Middle Childhood II: Language Arts **4 hours**
Emphasis on teaching the skills of reading, listening, speaking, and writing as they relate to the total curriculum. Emphasis on teaching of reading and the integration of the related areas in language arts. Students are expected to demonstrate competence in appropriate audio-visual aids. Classroom experience in public schools. *Prerequisite: Ed. 242.*

Ed. 348 Professional Practicum **4 hours**
Preparation of the prospective teacher for a professional role as observer and participant in the classroom. *Prerequisite: Ed. 242.*

Ed. 350 Reading: Diagnosis and Prescription **2 hours**
This is a methods course which deals with reading disabilities within the content areas. Format will include diagnosis of specific problems and their origins as well as prescription for correction and remediation. Those enrolled in the course will participate in laboratory situations to tutor disabled readers. (To be taken following or concurrent with Ed. 340 or Ed. 346.)

Ed. 355 Mathematics: Diagnosis and Prescription **2 hours**
This is a methods course which deals with corrective and remedial situations in mathematics. Format will include diagnosis of specific problems and their origins as well as prescription for corrections and remediation. Those enrolled in the course will participate in laboratory situations to tutor students with problems in mathematics. (To be taken following or concurrent with Ed. 345.)

Ed. 401 History and Philosophy of Education **2 hours**
Development of modern education in social, historical, and philosophical perspective, emphasizing backgrounds of present practices, current problems, and issues. Current practice is analyzed in terms of philosophic rationale and applications are made to the school situation.

Ed. 428 Principles and Techniques of Secondary Education **4 hours**
Aims, functions, and curriculum organization of middle, junior high, and senior high schools. Basic strategies, materials, and techniques, including evaluation applicable to teaching, are integrated with a full semester of student teaching in schools. Certification and employment procedures, professional practices, and continuing education are also considered. *Prerequisite: Ed. 348.*

- Ed. 447 Methods and Content in Elementary and Middle Childhood III: Science** **2 hours**
 Understanding of the concepts of the sciences approached through various methods, including unit study, inquiry, experimentation, and the process approach. Practical application in school situation. *Prerequisite: Ed. 348.*
- Ed. 448 Methods and Content in Elementary and Middle Childhood IV: Social Studies** **2 hours**
 Understanding of the concepts of social studies approached through various methods, including unit study, inquiry experimentation, and the process approach. Practical application in school situation. *Prerequisite: Ed. 348.*
- Ed. 470 Observation and Directed Teaching** **4 or 8 hours**
 Directed full-semester or half-semester observation and student teaching in schools with partial assignments in appropriate grade levels; to include weekly student teaching seminars and a minimum of 150 clock hours actual teaching. Students must make applications for student teaching prior to advance registration. Other course or activities which might interfere with student teaching are not permitted. (Concurrent with enrollment in the Education Year. CR/NCR course.)
- Ed. 475 Professional Internship** **4 hours**
 Participation in an adult training and/or educational program appropriate to the student's area of study and potential employment. Students will apply the skills and knowledge gained in previous courses.
- Ed. 480 Methods and Materials in Teaching** **2 or 4 hours**
 See courses numbered 480 offered by Biology, Chemistry, English, Fine and Applied Arts, Foreign Languages, General Sciences, Mathematics, Physical Education, Physics, Psychology and Social Sciences.
- Ed. 484 Methods of Teaching English as a Foreign Language** **2 hours**
 Directed study of techniques for teaching English vocabulary, spelling, and grammar to native speakers of other languages. Practical experience through tutoring.
- Ed. 487-488 Independent Study** **2 or 4 hours**
- Ed. 490 Senior Project** **2-8 hours**

Special Education

- Sp. Ed. 205 Introduction to the Exceptional Learner** **2 hours**
 This course is designed to serve as an integral part of the preparation of teachers of Specific Learning Disability students and others who are involved with exceptional students educationally. Recent social, legal, and educational trends related to the handicapped student will be discussed, as well as the characteristics and educational methods for various areas of exceptionalities.
- Sp. Ed. 206 Educating the Specific Learning Disabilities Student** **4 hours**
 This course is designed to introduce the characteristics of the Specific Learning Disability (SLD) student and models of intervention, mainstreaming, and roles of resource room, consulting room, and teachers of self-contained classrooms. A field placement is required for this course. *Prerequisite: Sp. Ed. 205.*
- Sp. Ed. 320 Teaching Methods for Specific Learning Disabilities: Early and Middle Childhood** **2 hours**
 This course is designed to instruct Specific Learning Disability (SLD) teachers in methods and models of intervention and synthesis of the diagnostic-prescriptive model. This is an SLD methods course for early and middle childhood that stresses intervention strategies for different levels of severity. *Prerequisite: Sp. Ed. 206.*
- Sp. Ed. 410 Tests and Measurements** **2 hours**
 This course is designed to provide teachers with knowledge of and experience with a variety of assessment instruments for the purpose of educational evaluation placement, diagnosis, and

intervention. Students will administer formal tests and develop informal tests as a means of acquiring skills with standardized, norm-referenced, criteria-referenced, diagnostic, and achievement tests to provide appropriate educational programs for the learning disabled student. *Prerequisite: Ed. 348.* (May be taken for credit as Psychology 410.)

**Sp. Ed. 470 Observation and Directed Teaching:
Specific Learning Disabilities** **4 hours**
Directed half-semester observation and student teaching in schools with partial assignments in appropriate specific learning disabilities placements, to include weekly student teaching seminars and a minimum of 150 clock hours actual teaching. Students must make application for student teaching prior to advance registration. Other course or activities which might interfere with student teaching are not permitted. Concurrent with enrollment in the Education Year and Education 470 (4 hours credit). Credit-No-Credit.

English

Aims

To help students to develop and maintain the ability to write clear and effective English; to guide them toward an increased understanding and critical appreciation of their literary heritage; to help prepare them for graduate and professional study. In addition, the department provides programs that prepare students for certification as teachers of English and Language Arts

Requirements for Field of Concentration

1. Concentration in English requires a minimum of 32 hours in the department, exclusive of the Senior Project. The following courses are required: 140 or 150, 325-326, 330, 341-342, 477. Related requirements are Interdisciplinary Studies 251, 252. Students should also elect at least one Seminar in British Literature (courses numbered 420-429), and at least one Seminar in American Literature (courses numbered 450-459). These seminars, together with other advanced courses or independent study, will extend the student's knowledge of one or two areas of literature, provide background for the Senior Project, and help to prepare for future study or a career. Thus, the program of a student preparing for the law or another profession will be different from that of a student preparing for graduate study in English or for secondary school teaching.
2. At least 12 hours in another department should be included in the field of concentration. These courses may be related to the student's special interests or vocational plans.
3. Students planning to attend graduate or professional schools should prepare to meet foreign language reading requirements.
4. Students are not accepted for concentration in English later than the beginning of their fifth semester unless they have completed English 140 (or 150) and either English 325-326 or English 341-342.
5. Students concentrating in English are expected to attain a minimum grade of C in all courses in the department.

6. Only students who have completed the following courses or their equivalents will be recommended for certification to teach English in secondary school: Eng. 140 or 150, 210, 325-326, 341-342, 370, 375, 483; FAA220; Eng. 290 or Ed. 290, Ed. 340, Eng. 480 or Ed. 480. Students must also complete certification requirements for Language Arts 5—8. Students interested in teaching should consult the Education Department listings for required courses in Professional Education.

Writing Proficiency Program

The Writing Proficiency Program is administered by the English Department. Students should complete the program and meet the writing proficiency requirement for graduation before the beginning of the senior year.

Students must achieve and maintain an above-average level of proficiency in expository writing by taking the annual Writing Qualification Test or by satisfactory completion of selected writing courses offered by the English Department.

Students who choose to satisfy the requirement by enrolling in writing courses may do so by electing from the following: English 100, 120, 125, 140, 150, 205, 209, 210, 213, or 351. No more than one course per academic year will apply to the requirement. See below for the number of courses needed to satisfy the writing proficiency requirement.

The Department of English will certify to the Registrar that a student has satisfied the writing proficiency requirement for graduation when proficiency has been demonstrated in one of the following ways:

1. By achieving a high level of proficiency on both the first Writing Qualification Test, taken in November of the freshman year, and the second Writing Qualification Test, taken in March or April of the sophomore year; or by achieving a grade of C+ or better in a writing course taken instead of either or both of these tests. *A student whose proficiency is certified in this way is not required to take additional tests or courses.*
2. By taking the first Writing Qualification Test in November of the freshman year and achieving a high level of proficiency on the third test, taken in April of the junior year.
3. By achieving a grade of C+ or better in a writing course taken in the junior year.
4. By achieving a grade of B or better in any writing equivalency course taken either the freshman or sophomore year.

Students who have not met the writing proficiency requirement before the beginning of their seventh semester must enroll in English 120, a non-credit, non-graded course in expository writing. Special Writing Qualification Tests are given as part of this course, and students must continue in the course until they have achieved a high level of proficiency on one of the special tests. Special Writing Qualification Tests are given to seniors only when enrolled in the course.

Special arrangements are made for students who transfer from other colleges. Transfer students should consult the Department of English immediately upon enrolling at Bethany.

Writing tests are given according to the following schedule:

November

Writing Qualification Test: Freshmen (Required)

February

Diagnostic Qualification Test: All students entering in February

April

Writing Qualification Test: Sophomores (Advisory) and Juniors (Required)

Eng. 100 College Composition

4 hours

A basic course for training and practice in the process of writing effective essays from the prewriting stage through final revision and polishing. Emphasis is on audience and purpose, point of view, organization and style. Formal assignments encourage students to write the types of essays they are likely to encounter in other college courses, including documented reports.

Eng. 120 Expository Writing

Non-credit

Training and practice in writing essays. (Required of all students who have not met the writing proficiency requirement before the beginning of their seventh semester. Not open to others.)

Eng. 125 Expository Writing Workshop

2 hours

Training and practice in writing clear and effective expository prose. After an initial diagnosis, an individual program is designed for each student. (Offered as a substitute for English 100 and an alternative to English 120. May not be taken on a credit-no credit basis.)

Eng. 140 Introduction to Literature

4 hours

Introduction to the study of poetry, drama, and fiction. Emphasis is on the development of techniques for the analysis and evaluation of poetry, drama, and fiction and on the writing of literary essays. (Open to all students. Required for concentration in English.)

Eng. 150 Honors Freshman English

4 hours

A course for freshmen of superior ability and accomplishment. Introduction to the principles of critical reading and writing and to the analysis and evaluation of poetry, drama, and fiction. Intensive practice in expository and imaginative writing with emphasis upon the achievement of clarity and accuracy. (May be substituted for Eng. 140 to fulfill requirement for concentration in English and prerequisites for English courses. Enrollment by invitation only.)

Eng. 160 Introduction to Film

4 hours

In this course, students will study the film as a technical artifact, an art object, a mirror of society, and a moral statement. They will see twelve classic films such as Chaplin's *City Lights*, Resnais's *Hiroshima Mon Amour*, Bergman's *Virgin Spring*, and Hitchcock's *Psycho*. Fee. \$15.

Eng. 170 Introduction to Poetry

4 hours

Development of the student's ability to read, understand, and evaluate poetry. Study of poetic forms and techniques, with some consideration of the historical development of poetry in English.

Eng. 205 Writing for Business and Industry

2 hours

Writing formal and informal reports, summaries, business letters, job descriptions, applications and resumes. Each student will complete approximately 10 writing assignments. *Prerequisite: English 100 or demonstrated competence in expository writing.*

Eng. 209 Technical Writing

4 hours

A workshop for training and practice in the written communication of specialized information to audiences with varying levels of knowledge. Emphasis is on the analysis of audiences and purposes, the selection and organization of information, the creation of informative graphics, and the manipulation of conventional formats to develop concise and effective instruction sets, descriptive analyses, abstracts, occurrence reports, literature reviews, feasibility studies, proposals, investigative reports and other types of writing usually required of professionals. Students will make use of the College's computer facilities for word processing and for generating graphs, charts and lists.

Eng. 210 Creative Writing Workshop

2 hours

Training and practice in the creative aspects of expository and imaginative writing. Students write essays, sketches, short fiction, poems, and dramatic scenes. (Required for students preparing to teach secondary school English. Enrollment limited to 15 students with preference given to juniors and seniors. May be repeated once for additional credit.) *Prerequisite: English 100 or its equivalent.*

- Eng. 213 Advanced Expository Writing 2 hours**
Intensive practice in writing expository prose with emphasis upon the achievement of literary excellence. (Enrollment limited to 15 students with preference given to juniors and seniors.) *Prerequisite: English 100 or the equivalent.*
- Eng. 261-262 British Novel 2 hours each**
Development of the British novel from the 18th century to the present. 261: Defoe through Dickens. 262: Hardy to the present.
- Eng. 263-264 American Novel 2 hours each**
Development of the American novel from the 19th century to the present. 263: Beginnings through World War I. 264: 1920s to the present.
- Eng. 266 Masterpieces of Western Literature 4 hours**
A study of major works from the Middle Ages through the nineteenth century. Such works as the following will be considered: Dante's *Divine Comedy*, Rabelais' *Gargantua and Pantagruel*, Cervantes' *Don Quixote*, Swift's *Gulliver's Travels*, Goethe's *Faust*, and Tolstoy's *Anna Karenina*.
- Eng. 267 Mythology 2 hours**
Study of Greek and Roman myths and their later use in Western art, literature, music, and science. Brief comparative study of Celtic and Germanic myths.
- Eng. 268 Modern World Literature 4 hours**
A study of the work of writers representing the diverse cultural traditions of the modern world. In addition to the works representing the western tradition, works will be studied representing such traditions as the Eastern European, the middle Eastern, the African, the Latin American and the Oriental.
- Eng. 270 Shakespeare 4 hours**
Rapid reading of the major plays with emphasis upon Shakespeare's themes, motifs, language and characterization. (May be taken for credit as Fine and Applied Arts 270.)
- Eng. 280-289 Colloquium in Literature 2 or 4 hours each**
Courses for the discussion of special topics in literature. (Enrollment in each course limited to 20 students.)
- Eng. 287 The Fiction of Southern Women 2 hours**
The course is an analysis and evaluation of novels and short stories written by women authors from the southern United States, from Kate Chopin to Alice Walker. Emphasis is on both the literary and social aspects of the works studied.
- Eng. 289 Children's Literature 2 hours**
Includes background of the history of literature for children; familiarity with established and current literature; work with children. (May be taken for credit as Education 289.)
- Eng. 290 Literature and Adolescence 2 hours**
Study of important works about or of special interest to young people of junior high school through high school age. Techniques of presenting the works are considered. Readings are primarily in short stories and novels. (Required for students preparing to teach secondary school English. (May be taken for credit as Education 290.)
- Eng. 325-326 British Literature 4 hours each**
Development of British literature from the beginning through the Victorian Period. First semester: from *Beowulf* through Milton. Second semester: from the Restoration to the end of the 19th century. (Required for concentration in English.) *Prerequisite: Eng. 140 or permission of the instructor.*

- Eng. 330 Twentieth-Century British Literature** **4 hours**
 Study of important works of British fiction and drama during this century. Writers to be included: Eliot, Yeats, Woolf, Joyce, Beckett, and Pinter. (Required for concentration in English.) *Prerequisite: Eng. 140.*
- Eng. 341-342 American Literature** **4 hours each**
 Development of American literature from the Colonial Period to the present with emphasis upon the writers of the 19th and 20th centuries. *Prerequisite: Eng. 140 or permission of the instructor.*
- Eng. 351 Literary Criticism** **4 hours**
 Study of the history of literary criticism, literary theory, and applied approaches to literary criticism. Special emphasis will be placed on the preparation of essays which apply various theories and demonstrate various critical points of view.
- Eng. 370 Development of Modern English** **4 hours**
 History of the English language from Anglo-Saxon to modern English with emphasis upon the structure and vocabulary of the latter. (Required for students preparing to teach secondary school English.) Not open to Freshmen.
- Eng. 375 English Grammar** **2 hours**
 The description and analysis of the grammar of the English language. Various grammatical systems are considered, such as the traditional, the structural, and the transformational-generative. (Required for students preparing to teach secondary school English.)
- Eng. 420-429 Seminar in Major Authors** **2 or 4 hours each**
 Advanced study of one or more major British, American, or European authors. (Enrollment in each course limited to 12 students. Topics change regularly.) *Prerequisite: previous study of the author or authors in a survey course.*
- Eng. 421 Hemingway** **2 hours**
 Study of selected fiction by Ernest Hemingway. Emphasis will be on the Nick Adams stories, "A Farewell to Arms" and "The Old Man and the Sea."
- Eng. 423 Johnson and Boswell** **4 hours**
 Study of the life and selected works of Samuel Johnson and of James Boswell as journalist and biographer.
- Eng. 440-449 Seminar in British Literature** **2 or 4 hours each**
 Advanced study of a period, movement, or tradition in British literature. (Enrollment in each course limited to 12 students. Topics change regularly.) *Prerequisite: previous study of the period, movement, or tradition in a survey course.*
- Eng. 444 Age of Johnson** **4 hours**
 Study of the major prose, poetry, and drama of the mid-eighteenth century with emphasis upon the work of Samuel Johnson and the members of his circle, including Boswell, Goldsmith, and others.
- Eng. 445 Victorian Writers** **4 hours**
 This course will investigate major poems by Tennyson (*In Memoriam* and *Idylls of the King*) and Browning (*The Ring and the Book*), poems and criticism by Matthew Arnold, and novels by Dickens, Thackeray and George Eliot.
- Eng. 450-459 Seminar in American Literature** **2 or 4 hours each**
 Advanced study of a period, movement, or tradition in American literature. (Enrollment in each course limited to 12 students. Topics change regularly.) *Prerequisite: previous study of the period, movement, or tradition in a survey course.*
- Eng. 450 Recent American Literature** **4 hours**
 A study of American poetry, drama and fiction since World War II. Emphasis is on the analysis of works representing the various ideas, techniques, styles and movements characterizing the writing of the last forty years.

- Eng. 456 The 1920's** **4 hours**
A study of the poetry, drama, fiction, and critical writings of the 1920's. Emphasis is on such major writers as Pound, Eliot, Fitzgerald, Hemingway, Faulkner, and O'Neill; but other important writers will also be studied.
- Eng. 457 Hawthorne, James, and Faulkner** **4 hours**
A study of critical and fictional works of Hawthorne, James, and Faulkner. Emphasis is on ideas, themes, and techniques.
- Eng. 477 English Seminar** **2 hours**
Reading and research designed to help students review and organize their knowledge of literature. *Prerequisites: English 140 or 150, 325-326, 330, 341-342 or permission of the instructor.*
- Eng. 480 Methods of Teaching English** **2 hours**
Teaching of high school composition and literature. Literary analysis, systems of grammar, and reading improvement. (May be taken for credit as Education 480.)
- Eng. 483 Theory and Practice of Teaching Composition** **2 hours**
An examination of historical and current theories of composition as a conceptual background for both teaching and writing. Students will study research and theory on the writing process. Students will practice both writing and teaching writing.
- Eng. 484 Methods of Teaching English as a Foreign Language** **2 hours**
Directed study of techniques for teaching English vocabulary, spelling, and grammar to native speakers of other languages. Practical experience through tutoring. (May be taken for credit as Education 484.) *Offered upon request.*
- Eng. 487-488 Independent Study** **2 or 4 hours each**
Individual study in any area of English for which the student is qualified. Independent study is offered only in areas not included in other courses in the department. *Prerequisites: Adequate preparation to undertake the study as determined by the instructor; permission of the head of the department.*
- Eng. 490 Senior Project** **2-8 hours**
Generally consists of a major critical paper on a topic developed from at least one of the student's elective courses in the department. During the junior year, the student should determine an area of interest and make a preliminary investigation of it after consulting with his or her mentor (the faculty member best qualified to assist in the project). Reading and research should continue during the student's senior year, and much of the final semester should be devoted to preparation of the paper. Sometimes the project may take other forms. Students wishing to undertake an unusual project must consult with the head of the department no later than the beginning of the fourth semester. Credit for the senior project is not included in the total number of hours required for concentration in English

Fine and Applied Arts

Aims

The Fine and Applied Arts Department provides study in the visual arts, music, theatre, and communication design. The purpose of the department is to give expression to the aesthetic unity of the various forms and modes of the arts and, at the same time, to permit students to pursue practice in the arts for both personal satisfaction and professional preparation. Emphases include 1) the cultural foundations and traditions of the arts, including studio and performance areas, 2) graphics and communication design, and 3) the professional aspects of arts management, including internship opportunities.

Requirements for Field of Concentration

Students concentrating in Fine and Applied Arts will take Fine and Applied Arts 101, 102, and 103. Related requirements are Interdisciplinary Studies 251, 252. In addition, the concentration requires completion of one of the following departmental emphases: 1) Two-Dimensional Art; 16 hours; 2) Three-Dimensional Art: 20 hours; 3) Communication Design: 26 hours; or 4) Theatre: 20 hours and Eng. 210. Also each student must complete FAA 477 and a Senior Project. Students interested in the field of Arts Management should complete one of the emphases above, the Professional Core Program in Management, and the course in Fine and Applied Arts 399.

Foundation Courses

FAA 101 Introduction to Art **4 hours**
Historical and aesthetic study of the visual arts from the ancient world to the present. Representative masterworks of art are studied, and consideration is given to aesthetic functions and values.

FAA 102 Introduction to Music **4 hours**
Historical and aesthetic study of music from Gregorian Chant to the present. Representative master works of music are studied, and consideration is given to aesthetic functions and values.

FAA 103 Dramatic Literature and Theatre Development **4 hours**
A survey of drama and theatre architecture and design with emphasis on both primary and secondary literature in both historical and aesthetic context.

FAA 120 Music as Art and Science **2 hours**
This course provides an aural study of classical and popular music within an aesthetic perspective. It surveys various musicians within various genres and does not presuppose any previous musical background. (Required of all students concentrating in Elementary Education.)

FAA 203 Interpersonal Communication: Public Speaking **4 hours**
Introduction to the dynamics of communication: levels of interaction between speaker and listener. Developing the use of voice and non-verbal signals; understanding oral style in language and logical argument in public speaking. Focus on the design and delivery of short speeches and on critical listening. (May be taken for credit as Communications 206.)

FAA 340 Art Activities in the Elementary Schools **4 hours**
Study of the theories and goals of art education in the elementary school with emphasis on the child's growth and development through art. Exploration of art techniques is included.

FAA 399 Fine Arts Management **2 hours**
The study of management principles and practices as applied to agencies and institutions in the various fields of the arts, such as museums, galleries, symphonies, theatres, and others.

FAA 477 Senior Seminar **2 hours**
Review of the fine arts area concentrating upon the student's field of emphasis.

FAA481 Methods and Materials in Teaching Elementary School Music **2 hours**
The aims and values of elementary school music will be studied, opportunities to develop teaching techniques will be provided, and introductions to standard materials will be made. (Required of all students concentrating in Elementary Education.)

FAA 487-488 Independent Study **2-4 hours**

FAA 490 Senior Project **2-8 hours**
Recommended to begin during the second semester of the junior year.

Two-Dimensional Art

FAA 200 Introduction to Two-Dimensional Design **4 hours**
Basic course work in the theories and practice of two-dimensional design; study of the elements and materials in relation to design potentials with practical applications.
Prerequisite for those emphasizing art.

FAA 205 Still-Life and Landscape **2 hours**
Concentrated activity in drawing using a variety of drawing media. Primary emphasis is placed on still life and landscape.

FAA 206 Figure and Portraiture Drawing **2 hours**
Concentrated activity in drawing using a variety of drawing media. Primary emphasis is placed on figure drawing and portraiture.

FAA 300 Watercolor Painting **2 hours**
Creative exploration of the techniques of watercolor and acrylics, using still life, landscape, portraiture, and imaginative subject matter in a variety of styles.

FAA 301 Oil Painting **2 hours**
Creative exploration of the techniques of oil paints and compatible media, using still life, landscape, portraiture, and imaginative subject matter in a variety of styles.

FAA 305 Advanced Still-Life and Landscape Drawing **2 hours**
Advanced problems in drawing with a concentration in a specific area, including still life, landscape, and imaginary drawing. Emphasis on composition. *Prerequisite: FAA 205.*

FAA 306 Advanced Figure and Portraiture Drawing **2 hours**
Advanced problems in drawing with a concentration in a specific area, including figure drawing and portraiture. *Prerequisite: FAA 206.*

Three-Dimensional Art

FAA 200 Introduction to Two-Dimensional Design **4 hours**
(See Two-Dimensional Art Emphasis.)

FAA 201 Introduction to Three-Dimensional Design **4 hours**
Basic course work in the theories and practice of three-dimensional design; study of the elements and materials in relation to design potentials with practical applications. *Prerequisite for those emphasizing three-dimensional art.*

FAA 210 Ceramics I **2 hours**
Studio experience in forming, firing, and glazing pottery, including ceramic sculpture.

FAA 310 Ceramics II **2 hours**
Advanced problems in media and subject matter selected by the student with the advice of the instructor. *Prerequisite: FAA 210.*

FAA 320 Sculpture I **2 hours**
Creative expression in three-dimensional forms. Students work with materials that are readily available and easily handled such as wood, wire, plaster, and clay. *Prerequisite: FAA 201 or permission of the instructor.*

FAA 420 Sculpture II **2 hours**
Advanced problems in media and subject matter selected by the student with the advice of the instructor. *Prerequisite: FAA 320.*

FAA 425 Printmaking **4 hours**
The study of printmaking processes emphasizing creative expression through such techniques as relief, intaglio, planography, and serigraphy. *Prerequisite: FAA 205 or permission of the instructor.*

Communication Design

FAA 200 Introduction to Two-Dimensional Design **4 hours**
(See Two-Dimensional Art Emphasis.)

FAA 302 Airbrush Techniques **2 hours**
Beginning through advanced airbrush techniques. Exploration of various hues — graphic design, photo retouching, ceramics, and painting.

FAA 303 Lettering and Layout **4 hours**
Introduction to calligraphy, typography, letter forms, and layout, with emphasis on design, legibility, and creative practice.

- FAA 304 Design Applications** **4 hours**
 Emphasis on problem-solving experiences as related to visual communications. The mechanics and psychology of two-dimensional and three-dimensional design are explored as a foundation for graphic design.
- FAA 308 Computer Graphics and Applied Design** **4 hours**
 Practical applications of graphics and communication design techniques as related to the computer and other technological aids. *Prerequisite: FAA 303 and 304 or permission of the instructor.*
- FAA 404 Television Graphics** **4 hours**
 Emphasis on the design of visual symbols for television. Combines principles of graphic art with the particular requirements of television production. *Prerequisite: FAA 308 or permission of the instructor.*
- FAA 405 Communication Design Practice** **4 hours**
 The study of professional procedures, structures, communication functions, and processes as applied to areas of graphic design. *Prerequisite: FAA 303 and 304, or permission of the instructor.*

Music

- FAA 125-126 College Choir** **1 hour each**
 Preparation for performance of choral music. (Activity course: CR/NCR only.) *Enrollment by audition.*
- FAA 131-132 Brass Ensemble** **1 hour each**
 Preparation for performing music for brass instruments. (Activity course: CR/NCR only.)
- FAA 135-136 Chamber Ensemble** **1 hour each**
 Preparation for performance of the standard chamber literature; quartets, trios, and other works according to the instrumentalists available. (Activity course: CR/NCR only.) *Enrollment by audition.*
- FAA 137-138 Jazz-Rock Ensemble** **1 hour each**
 Preparation for performance of contemporary jazz and rock arrangements. (Activity course: CR/NCR only.) *Enrollment by audition.*
- FAA 161-162 Harpsichord** **1 hour each**
 Private instruction in the techniques, literature and history of the harpsichord. (Activity course: CR/NCR only.) *Prerequisite: proficiency on the piano. Enrollment by permission of the instructor.*
- FAA 163-164 Pipe Organ** **1 hour each**
 Private instruction in the techniques, theory and literature of the pipe organ. *Prerequisites: proficiency on the piano.* (Activity course: CR/NCR only.) *Enrollment by permission of the instructor.*
- FAA 165-166 Piano** **1 hour each**
 Instruction of the techniques, theory, and literature of the piano. (Activity course: CR/NCR only.) *Enrollment by permission of the instructor.*
- FAA 167-168 Strings** **1 hour each**
 Private instruction in the techniques, theory, and literature of violin, viola, cello, or bass. (Activity course: CR/NCR only.) *Enrollment by permission of the instructor.*
- FAA 169-170 Classical Guitar** **1 hour each**
 Private instruction in the techniques, theory, and literature of the classical guitar. (Activity course: CR/NCR only.) *Enrollment by permission of the instructor.*
- FAA 171-172 Winds** **1 hour each**
 Private instruction in the techniques, theory, and literature of the brass and woodwind instruments. (Activity course: CR/NCR only.) *Enrollment by permission of the instructor.*
- FAA 173-174 Voice** **1 hour each**
 Private instruction in the technique, theory, and literature of voice. (Activity course: CR/NCR only.) *Enrollment by permission of the instructor.*

Theatre

FAA 151	Fundamentals of Stage Construction	2 hours
FAA 152	Theatre Lighting	2 hours
FAA 153	Theatre Make-Up	2 hours
FAA 154	Costuming <i>Not required for Theatre Emphasis in FAA</i>	2 hours
FAA 155	Scene Painting Techniques in painting stage scenery used in stage design: spattering, dry and wet scumbling, dry brushing, stippling, feather dusting, and rag rolling.	2 hours
FAA 215	Dance for Non-Dancers The development of beginning dance skills with emphasis upon improvisational dance modes and creative body language.	2 hours
FAA 220	Beginning Acting Movement, various styles, improvisations, projections of character, and speech technique. The course includes a 10-20 minute planned and rehearsed program that demonstrates skills acquired in improvisation and body and voice techniques.	2 hours
FAA 222	Advanced Acting Scene study as a unit of theatrical form. Scenes from various periods to be directed and performed. Focus on interaction between characters. <i>Prerequisite: FAA 220.</i>	2 hours
FAA 230	Children's Theatre The development of techniques required in writing for and performing before children.	2 hours
FAA 232	Musical Comedy Study of musical comedy scores and libretti, basic principles of musical comedy singing, dancing, and acting, and other fundamentals of the genre.	2 hours
FAA 270	Shakespeare Rapid reading of the major plays with emphasis upon Shakespeare's themes, motifs, language and characterization. (May be taken for credit as English 270.)	4 hours
FAA 330	Directing Fundamentals of staging, blocking, movement, stage business, tempo, script analyses, casting, and rehearsal planning. The course includes preparation of a prompt book for a one-act play to be directed for public performance. <i>Prerequisite: FAA 220.</i>	2 hours
FAA 416	Opera This course is designed to introduce the general student to operatic techniques and conventions. The principle emphasis will be on the ways in which music enhances dramatic elements in operas of Mozart and Verdi. No technical knowledge of music is required.	2 hours

Foreign Languages

Aims

To familiarize students with the language and literature of the French, German, and Spanish speaking peoples; to help students understand a culture other than their own; and to assist students in preparing for careers requiring foreign language skills. The program also provides students interested in research with a reading knowledge of a foreign language, and it helps travelers to foreign countries acquire basic conversation skills.

Requirements for Field of Concentration in French, German, or Spanish

A minimum of 24 hours in the target language (not including French 110-120, German 110-120, or Spanish 110-120) plus Foreign Language 425, and a Senior Project. Related requirements are Interdisciplinary Studies 251, 252.

A working knowledge of a foreign language other than the one chosen as the field of concentration is recommended. Every student is required to spend a minimum of one semester studying in a country where his or her major foreign language is spoken. Students expecting to teach a foreign language must complete Foreign Language 480 and 481 and the appropriate civilization and survey of literature courses.

Foreign Language majors should consider a strong second field in an area related to career goals.

Only students who have completed the following courses or their equivalents will be recommended for state certification to teach French, German or Spanish in secondary school. French - major: Fr. 110, 120, 230, either 240 or 241, 313, either 351 or 352. F.L. 425, 480 and any other four hours of French. German - major: Ger. 110, 120, 230, either 240 or 241, 312, 351 or 352. F.L. 425, 480 and any other four hours of German. Spanish - major: Sp. 110, 120, 230, either 240 or 241, 310 or 311, 351 or 352. F.L. 425, 480 and any other four hours of Spanish. Students must also complete the requirements for certification in grades 5—8 for their respective language. See the Education Department listings for required Professional Education courses.

French

Fr. 110 French I **4 hours**

This is the first of three courses emphasizing the acquisition of French language skills needed to satisfy basic social requirements in French-speaking countries. Elementary listening, speaking, reading and writing needs are addressed, as well as an introduction to French cultures and issues. (Oral practice sessions are required. French I is intended primarily for students who have no acquaintance with the language.)

Fr. 120 French II **4 hours**

The second of three courses: See French 110. *Prerequisite: Fr. 110 or equivalent.*

Fr. 230 French III **4 hours**

The third of three courses: See French 110. *Prerequisite: Fr. 120 or equivalent.*

Fr. 240 Conversation and Composition: The Living Language **4 hours**

French and American life styles are compared through discussions, skits, and compositions designed to improve the student's communication skills in French. *Prerequisite: Fr. 230 or equivalent.*

- Fr. 241 Conversation and Composition: Francophone World** **4 hours**
While improving skills of spoken and written communications in French, the student becomes acquainted with contemporary issues in the French-speaking world. *Prerequisite: Fr. 230 or equivalent.*
- Fr. 313 France** **4 hours**
Introduction to France, with special attention to its political and cultural history, contemporary institutions, activities, customs and values. Cross-cultural comparisons and contrasts of France and the United States are included.
- Fr. 351 Survey of French Literature I** **4 hours**
Survey of French literature from the earliest periods to the end of the 18th century. Readings in French from an anthology and certain reference works. Conducted in French. *Prerequisite: Fr. 230 or equivalent.*
- Fr. 352 Survey of French Literature II** **4 hours**
Survey of French literature of the 19th and 20th centuries. Introduction to *explication de texte* techniques. Readings in French from an anthology and certain reference works. Conducted in French. *Prerequisite: Fr. 230 or equivalent.*
- Fr. 410 Special Topics in French Literature** **2 or 4 hours**
Advanced literature seminars highlighting major literary movements, genres and themes from the French-speaking world. *Prerequisite: Fr. 351 or 352.*
- Fr. 487-488 Independent Study** **2 or 4 hours each**
- Fr. 490 Senior Project** **2-8 hours**

German

- Ger. 110 German I** **4 hours**
This is the first of three courses emphasizing the acquisition of German language skills needed to satisfy basic social requirements in the German-speaking countries. Elementary listening, speaking, reading, and writing needs are addressed, as well as an introduction to German culture and issues. (Oral practice sessions are required. German I is intended primarily for students who have no acquaintance with the language.)
- Ger. 120 German II** **4 hours**
The second of three courses: See German 110. *Prerequisite: Ger. 110 or equivalent.*
- Ger. 230 German III** **4 hours**
The third of three courses: See German 110. *Prerequisite: Ger. 120 or equivalent.*
- Ger. 240 Conversation and Composition I** **4 hours**
Discussion of life in Germany. Designed to improve communication skills. Brief oral and written reports. *Prerequisite: Ger. 230 or equivalent.*
- Ger. 241 Conversation and Composition II** **4 hours**
While improving skills of spoken and written communication in German, the student will discuss contemporary problems. *Prerequisite: Ger. 230 or equivalent.*
- Ger. 302 German Business Correspondence** **2 hours**
Designed to prepare students for possible employment in German-American firms through the development of skills in business letter writing and familiarization with German technical terms in business and banking. *Prerequisite: Ger. 230 or equivalent.*
- Ger. 312 German Civilization** **4 hours**
Designed to acquaint the student with the history, culture, and people of the German speaking countries, the two Germanies, Switzerland and Austria.
- Ger. 351 Survey of German Literature I** **4 hours**
Survey of German literature from the earliest periods to the beginning of the 19th century. Readings in German from an anthology. Conducted in German. *Prerequisite: Ger. 230 or equivalent.*
- Ger. 352 Survey of German Literature II** **4 hours**
Survey of German Literature from the Romantic period to the present. Readings in German from an anthology. Conducted in German. *Prerequisite: Ger. 230 or equivalent.*

Ger. 410 Special Topics in German Literature	2 or 4 hours
Advanced literature seminars highlighting major literary movements, genres and themes from the German-speaking world. <i>Prerequisite: Ger. 351 or 352.</i>	
Ger. 487-488 Independent Study	2 or 4 hours each
Ger. 490 Senior Project	2-8 hours

Spanish

Span. 110 Spanish I	4 hours
This is the first of three courses emphasizing the acquisition of Spanish language skills needed to satisfy basic social requirements in Spanish-speaking countries. Elementary listening, speaking, reading, and writing needs are addressed, as well as an introduction to cultures and issues. (Oral practice sessions are required. Spanish I is intended primarily for students who have no acquaintance with the language.)	
Span. 120 Spanish II	4 hours
The second of three courses: See Spanish 110. <i>Prerequisite: Span. 110 or equivalent.</i>	
Span. 230 Spanish III	4 hours
The third of three courses: See Spanish 120. <i>Prerequisite: Span. 110 or equivalent.</i>	
Span. 240 Conversation and Composition: Spain	4 hours
Intensive training in spoken and written Spanish with emphasis on current events in Spain. Oral reports are based on readings from newspapers, magazines, and literary works. <i>Prerequisite: Span. 230 or equivalent.</i>	
Span. 241 Conversation and Composition: Spanish American	4 hours
Intensive training in spoken and written Spanish with emphasis on current events in Latin America. Oral reports are based on readings from newspapers, magazines, and literary works. <i>Prerequisite: Span. 230 or equivalent.</i>	
Span. 302 International Spanish Correspondence and Translation	4 hours
Designed to prepare students of Spanish for possible employment in international government and commercial professions through the development of skills in business and diplomatic letter writing, familiarization with technical Spanish terms, instruction in methods of modern translation, and comprehensive preparation for bilingual positions.	
Span. 310 Spanish American Civilization	4 hours
Development of Latin America from the pre-Columbian era to the present day in art, music, drama, history, and literature. Each student does research on a specific project selected in consultation with the instructor. Conducted in English.	
Span. 311 Spanish Civilization	4 hours
Spain's influence on the history, art, music, drama, literature, and science of the world. Each student does research on a specific project selected in consultation with the instructor. Conducted in English.	
Span. 351 Survey of Spanish Literature I	4 hours
Survey of Spanish literature from the Middle Ages through the 17th century. Readings in Spanish from the Medieval, Renaissance and Baroque periods. Conducted in Spanish. <i>Prerequisite: Span. 200 or equivalent.</i>	
Span. 352 Survey of Spanish Literature II	4 hours
Representative authors and works from the Neoclassic, Romantic and Realist periods as well as the various 20th century literary movements. Conducted in Spanish. <i>Prerequisite: Span. 200 or equivalent.</i>	
Span. 353 Survey of Spanish American Literature	4 hours
Great authors and works of Spanish American literature from the beginning to the present. Conducted in Spanish. <i>Prerequisite: Span. 200 or equivalent.</i>	
Span. 354 Literature of Spain: Romanticism and Realism	4 hours
Discussion and analysis of 19th century drama, poetry and novel. Conducted in Spanish. <i>Prerequisite: Span. 240 or above.</i>	

Span. 355 Literature of Spain: The Golden Age **4 hours**
Poetry, drama and novel of Spain's 16th and 17th centuries. Conducted in Spanish. *Prerequisite:* Span. 240 or above.

Literary Studies

Span. 403 Literature of Spain: The Generation of '98 and the 20th Century **4 hours**
Works of the novelists and philosophers who searched for the reasons for Spain's decline at the end of the 19th century, and of representative authors of the 20th century. *Prerequisite:* Span. 200 or equivalent.

Span. 406 Contemporary Literature in Spanish America **4 hours**
Survey of modern novels and their expression of important aspects of Latin American life. *Prerequisite:* Span. 200 or equivalent.

Span. 451 Literature of Spain: 19th Century Romantics **2 hours**
Poetry, plays, and legends from the first half of the 19th century. *Prerequisite:* Span. 200 or equivalent.

Span. 452 Literature of Spain: 19th Century Realists **2 hours**
The regional novel of customs. Psychological, social, and thesis novels of the last half of the 19th century. *Prerequisite:* Span. 200 or equivalent.

Span. 453 Literature of Spain: The Golden Age **2 hours**
Poetry and drama of the 16th and 17th centuries when Spain was at its artistic and literary height. *Prerequisite:* Span. 200 or equivalent.

Span. 454 Literature of Spain: Don Quixote **2 hours**
Cervantes' masterpiece presenting the contrast of idealism and imagination versus realism and practicality in a great novel. *Prerequisite:* Span. 200 or equivalent.

Span. 487-488 Independent Study **2 or 4 hours each**

Span. 490 Senior Project **2-8 hours**

Greek

Gr. 301 Hellenistic Greek I **4 hours**
Introduction to the grammar of the Greek language in the Hellenistic Age. Primary emphasis is placed on the structure of the Greek of the New Testament.

Gr. 302 Hellenistic Greek II **4 hours**
Continuation of Gr. 301 with greater emphasis upon syntax and reading of the Greek New Testament.

Gr. 401 Hellenistic Greek Readings I **4 hours**
For students who have had a basic course in the Greek language. Facilitates the reading and interpretation of texts from the Septuagint, the New Testament, papyri, and early Christian writers.

Gr. 402 Hellenistic Greek Readings II **4 hours**
Continuation of Gr. 401 with readings in early Christian literature.

Gr. 487-488 Independent Study **2 or 4 hours each**

Foreign Language

F.L. 425 Introduction to Linguistics **2 hours**
Basic concepts and terminology of linguistics. Required of all majors in the department.

F.L. 480 Methods and Materials in Teaching Foreign Languages **2 hours**
Methods, teaching materials, lesson planning, and extracurricular activities necessary for the teacher of French, German, or Spanish as a foreign language. (May be taken for credit as Education 480.)

F.L. 481	Foreign Languages for Middle Childhood	2 hours
Methods, teaching materials, lesson planning, and extracurricular activities necessary for the middle childhood teacher of French, German, or Spanish as a foreign language. Special emphasis on aural-oral teaching techniques and characteristics of the transescent language learner.		
F.L. 487-488	Independent Study in Foreign Languages	2 or 4 hours

General Sciences

The division of General Sciences is a grouping of courses only. It is not a department and does not offer a field of concentration. It provides a number of programs, many of which are interdisciplinary in nature, designed principally for non-science majors. Some of these courses, however, such as the history of science, are excellent supplements to the college programs of science majors. In addition, special courses are offered for those who are interested in the teaching of science at the secondary school level.

Only students who have completed the following courses or their equivalents will be recommended for state certification to teach General Science in the secondary school: Bio. 100, and four additional Biology hours; Chem. 101, 102; G.S. 201, 202, 480; Physics 201, 202; Ed. 447; C.S. 482; and at least two additional hours from the following: G.S. 101, 209, 210, or C.S. 140. See the Education Department listings for required Professional Education courses.

G.S. 100	Consumer Chemistry	4 hours
A course emphasizing an understanding of chemical concepts relevant to our everyday lives. At the end of this course, a student should be able to analyze and discuss magazine and newspaper articles dealing with the subjects related to chemistry. (This course is designed for non-science students. May be taken for credit as Chemistry 100.)		

G.S. 101	Natural Philosophy	4 hours
Examination of man's changing ideas about the universe. Emphasis is placed upon the role of science as a social institution contributing to these changing beliefs.		

G.S. 201	Astronomy	4 hours
Non-technical course in descriptive astronomy and cosmology, including such topics as the solar system, stars, galactic systems, telescropy, rocketry, and space travel.		

G.S. 202	Physical and Cultural Geography	4 hours
A study of the interactions between environments and human activities over the earth's surface: land, sea and air. A complementary aspect of the course is devoted to place-name geography.		

G.S. 209	History and Philosophy of Science	4 hours
Study of some of the major ideas conceived by western man in attempting to comprehend and describe the natural world. (May be taken for credit as Philosophy 353.) <i>Prerequisite: one year of college level science or permission of the instructor.</i>		

G.S. 210	Science, Technology, and Society	4 hours
Historical examination of the effects of scientific and technological innovations upon various societies, emphasis being placed upon technology and science of the western world since 1850.		

G.S. 480	Methods and Materials in Teaching Physical and Life Sciences	4 hours
Aims and methods of teaching the physical and life sciences in the secondary schools. Special attention is given to teaching general laboratory procedures and techniques of teaching. Each of the departments in the physical and life sciences participates in the program. <i>Prerequisite: 16 hours in one of the physical or life sciences or permission of the instructor.</i>		

G.S. 487-488	Independent Study	2 or 4 hours each
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Geography

(See General Science 202 and Social Science 302.)

Graphics

(See Computer Science 400 and Fine and Applied Arts 404, 405, and 406.)

Health Science

Aims

The curriculum in Health Science is interdepartmental, providing the opportunity to earn a Bachelor of Science degree for students who have completed accredited allied health certification programs at other institutions.

In addition to the all-college graduation requirements, students in Health Science may choose among three specializations: Science, Management, and Education. These programs are designed to prepare allied health professionals for graduate or professional school, career changes within allied health fields, or management or educational positions in health professions agencies.

Requirements for Field of Concentration

Students admitted to this degree program must have completed an accredited allied health certification in areas such as respiratory therapy, radiology, or a comparable field.

In the *Science* area of specialization, students must complete 44 hours of selected science courses, plus a Senior Project. These courses will include Chemistry 101, 102, 211, and 212; Physics 201 and 202; Mathematics 281; and 16 hours chosen from Biology 100, 167, 180, 343, 440, and 467.

In the *Management* area of specialization, students must complete 42 hours of selected courses, plus a Senior Project. These courses will include Accounting 211 and 212; Economics 111, 200, 280, 286, 287, and 290; Computer Science 140 or 144; Mathematics 281 and 282; and Communications 302.

In the *Education* area of specialization, students must complete 40 hours of selected courses, plus a Senior Project. These courses will include Education 201, 202, 349, 410, 428, and 470, as well as Education 311, 312 and 476. In addition, students will complete Psychology 100, and Sociology 100 and 362.

For course descriptions, see the listings in the respective departments. Further details of the program may be obtained from the Director of the Health Science Degree Program or the Office of the Dean of the Faculty.

Heuristics

Heuristics 301-302 **2 hours each**
Investigation and discovery of methodologies of problem-solving within a broad spectrum of academic disciplines and pragmatic pursuits. (Open to juniors and seniors only.) *Prerequisite: permission of instructor.*

History

Aims

To present the origin and development of institutions and ideas; to point out the great traditions that are molding our thought and action today; and to gain a better perspective of our political, economic, cultural, and social life.

Requirements for Field of Concentration

Twelve hours in European history, including History 301-302, 12 hours of American history, including History 201-202. Four hours in political science, four hours in either African or Asian or Latin American history, History 477, and a Senior Project. A related requirement is Interdisciplinary Studies 251 or 252, the other being strongly recommended. Students planning to attend graduate or professional schools should anticipate possible requirements in the areas of foreign language, statistics, accounting, and computer technology.

European and World History

Hist. 100 Western Civilization **4 hours**
A survey of the Greek, Roman, Medieval and modern periods of western history. Cultural, diplomatic, economic, social and political topics are considered.

Hist. 297-298 Special Studies in History **2 or 4 hours**
Designed to permit students to study with various faculty members in the department or with visiting instructors or foreign visitors.

Hist. 301-302 Modern European History **4 hours each**
Survey of European civilization from the Renaissance to the present. Second semester begins with 1815.

Hist. 327 British History **4 hours**
A survey of British society to the Elizabethan period followed by a more detailed study of the Elizabethan period through World War II. Topics such as the nature of the 18th century politics, the Industrial Revolution, liberal and Victorian England, the impact of the World Wars on British society, and the "Irish Question" will be examined.

- Hist. 351 Ancient Near Eastern Civilization** 4 hours
This course introduces the students to the historical development of life, culture, and religions of Mesopotamia, Egypt, and the Syro-Phonecian coast, including international relations from pre-history to Alexander the Great. (May be taken for credit as Religious Studies 351.)
- Hist. 353 Hellenistic Civilization** 4 hours
Development of an acquaintance with the Graeco-Roman Oriental world based on a survey of social and cultural developments from Alexander the Great to Julius Caesar. (May be taken for credit as Religious Studies 353.)
- Hist. 381 History of the Middle East and North Africa** 2 hours
Historical survey of the rise of the Islamic empires from the time of the Prophet, including the Caliphates, the classical period of Islam, and the Ottoman rule to the end of World War II.
- Hist. 382 Cultural Life in the Middle East and North Africa** 4 hours
Study of the cultural developments and impact of Islamic civilization, including religion, art, literature, philosophy, and law. (May be taken for credit as Religious Studies 382.)
- Hist. 428 The Middle Ages** 4 hours
Study of the decline of ancient civilization, the Byzantine and Islamic cultures, and especially the development of Western Europe to the 14th century.

American History

- Hist. 201-202 U.S. History** 4 hours each
Political, economic, and social growth of America. First semester covers the period of exploration to 1865; second semester from 1865 to the present.
- Hist. 225 West Virginia History, Government, and Geography** 2 hours
History of the western section of Virginia to the Civil War and the history and government of West Virginia to the present. The physical, political, and social geography of the state is included. Field trips to various sections of the state are included as part of the course.
- Hist. 275 Connections** 2 hours
A television seminar program that explores the relationships between technologies of the past and present. The flexible course design will appeal to students of varying backgrounds in science and technology.
- Hist. 288 The American Political Novel** 2 hours
Political life in the United States at the municipal, state, and federal level as reflected in a number of political novels since 1932. The course examines *Grapes of Wrath*, John Steinbeck; *It Can't Happen Here*, Sinclair Lewis; *All the King's Men*, Robert Penn Warren; *The Last Hurrah*, Edwin O'Connor; and *Advise and Consent*, Alan Drury, plus an additional book selected for each student. (May be taken for credit as Politics and Public Policy 288.)
- Hist. 295 Local Architectural History** 4 hours
Students will study and document the interrelationship between the architectural history of a clearly defined local region and the cultural, social and economic forces which shaped the area. Although most of the work will be done in the field, lectures, readings and surveys will be included. Each student will prepare a photographic and written analytic report of an important historical structure or area. *Prerequisite: Permission of the Instructor.*
- Hist. 341 Development of the American Nation** 4 hours
History of the United States from 1816 to 1861. Considers growth of American nationalism and sectionalism following the War of 1812; the rise of Jacksonian Democracy, territorial expansion, and the coming of the Civil War.
- Hist. 342 Age of Big Business** 4 hours
Political, social, and economic history of the U.S. from 1865 to 1914. Emphasis is placed on the growth of industrialism during this period and the resulting attempts at social reform.
- Hist. 423 Contemporary U.S. History** 4 hours
The history of the United States since 1945. The course will include a brief review of the Progressive Era, the 1920s and the New Deal. Films, records, contemporary magazines, scholarly journals and newspapers will be used in addition to the textbooks.

Hist. 426 Latin America**4 hours**

Study of the geography, politics, social composition, economic structure, history and problems of Latin America.

Hist. 465 Constitutional Law**4 hours**

Study of the judicial elaboration and interpretation of the U.S. Constitution. A case study approach to the historical development of American constitutional principles. (May be taken for credit as Politics and Public Policy 465.)

Hist. 477 Historical Writings and Methods**2 hours**

Study of the major works of the ancient, medieval, and modern European and American historians with emphasis on the various schools and methods of interpretation. The student also receives an introduction to the nature and methods of history as an intellectual discipline. Emphasis is placed on the technique of historical research, and the art of expression and critical analysis.

Hist. 487-488 Independent Study**2 or 4 hours each****Hist. 490 Senior Project****2-6 hours**

Begins first semester of the senior year.

Interdisciplinary Studies

Aims

The interdisciplinary studies program recognizes that some students are more likely to achieve the goals of an “integrated education” and a “self-examined life,” as set forth in the Bethany Plan, by designing their own cross-disciplinary field of concentration. The aim of the program is to facilitate such study by providing the machinery needed for its implementation and evaluation; by aiding the student in the study of interdisciplinary methods and problems; by critically evaluating the student’s grasp of methods and materials of various disciplines; and by requiring the student to integrate his or her knowledge of materials and methods, derived from various disciplines, around a single problem or idea.

Requirements for Field of Concentration

The interdisciplinary studies program is designed to facilitate the faculty-sponsored or student-initiated program of study that cuts across departmental lines. The initiator of the program is responsible for establishing the content of the special curriculum, for stating the goals of the special curriculum, and for justifying the creation of a special curriculum. The Committee on Interdisciplinary Study approves or rejects the curriculum proposal. The program must include at least 24 hours (excluding the Senior Project) in an approved core curriculum. The special curriculum may not exceed 72 hours. No more than 48 hours in any one department will be counted toward graduation. All work is supervised by the director of interdisciplinary studies. The director serves as the student’s academic advisor throughout the program of study.

Admission to the Interdisciplinary Studies Program

It is recommended that all proposals for admission to the program be submitted to the director on or before the last day of the last semester of the student’s sophomore year. Students who apply after this date may find that it will take them an extra summer or an extra semester to meet all requirements for graduation. Students will normally be denied admission to the program if they apply after mid-term of their fifth semester.

All proposals should be prepared in consultation with the director of interdisciplinary studies.

Senior Comprehensive Examination: Students must have completed at least 24 hours of study in their special curriculum (including all courses designed as required in the original proposal) before they are eligible to take the examination.

Senior Project: Students who wish to do 4-8 hour Senior Projects must have their programs approved by the director on or before the last day of the last semester of their junior year.

Information is available from the Education Department or the Psychology Department.

This course centers on the modern world and its origins and stresses the basic ideas, historical events, aesthetic styles and primary writings which have shaped the modern world. (Must be taken in the first year by all new freshmen and by all transfer students who matriculate as freshmen or sophomores.)

An exploration of the problems of world food resources, production and distribution. Special emphasis will be placed on inequalities between the have's and the have-not's, the effects of malnourishment on human behavior and on social and political conditions, and alternative technological and political solutions to the problem. *Not open to Freshmen.*

An analysis of energy resources and needs of the modern world in historical and geographical context. Psychological, social and political ramifications are examined and alternative solutions to energy problems are evaluated. *Not open to Freshmen.*

This course examines the origins, nature, cost, containment, and prevention of terrorism, violence, and revolution in today's world, focusing in particular on the reasons why many nations and peoples outside the ruling classes of the major developed nations turn to violence. *Not open to Freshmen.*

A study of the changing roles of women and men in the world. Special attention is given to the traditional values of major human cultures and the repercussions of changing sex roles on those values and on society's institutions. *Not open to Freshmen.*

I.S. 210 The Origins of Life **4 hours**
This interdisciplinary course focuses on the question “What is the probability that we, as humans, will encounter other life forms in the universe?” The main focus will concern the physical conditions necessary for the origin of life forms in the universe, particularly with respect to the origin of life on Earth. The history of ideas and concepts related to this question and a review of current theories and experimental work in this area will be covered. The economic, philosophical and attitudinal impact of this question on today’s society will also be explored. This course is designed for those majoring in the Social Sciences and the Humanities, although it may be taken by those majoring in the Sciences. Appropriate laboratory experiences and demonstrations will be an integral part of the course. *Not open to Freshmen.*

I.S. 241 Multi-National Corporations and the Third World **4 hours**
This course will examine the structure, operations and political and economic impact of U.S. multi-national corporations. Particular emphasis will be given to the activities of these corporations in third world nations. The course should provide perspective on multi-nationals as major actors on the international scene, and also sensitize students to some of the problems of developing nations.

I.S. 251 Origins of Western Thought I: The Ancient World **4 hours**
Examination of ideal behavior as it emerges from and influences political, religious, scientific, philosophical, artistic, social and economic activity and thought from early Greece to the fall of Rome. *Not open to Freshmen.*

I.S. 252 Origins of Western Thought II: The Medieval and Renaissance World **4 hours**
Examination of ideal behavior as it emerges from and influences political, religious, scientific, philosophical, artistic, social and economic activity and thought in the medieval and Renaissance periods. *Not open to Freshmen.*

I.S. 487-488 Independent Study **2 or 4 hours**

I.S. 490 Senior Project **4-8 hours**

Library

Aims

The T.W. Phillips Memorial Library provides a variety of educational services to the Bethany College community through an experienced and well-trained staff and a wealth of learning resources. The librarians view their purpose in the following ways: to provide materials which support the Bethany curriculum and the individual projects of students, to encourage students to ask questions and to assist them in their search for answers through the teaching of bibliographic skills, to help students develop a love of books and an awareness of the vast amount of information available throughout the world, and to develop an understanding of the importance to individuals and to societies of having access to information.

Mathematics

Aims

To provide the general student with a knowledge of the foundations of mathematics; to give the prospective teacher an understanding and appreciation of the fundamental ideas of elementary mathematics; to provide a tool for the technical student; and to give the prospective graduate student a foundation for later study and research.

Requirements for Field of Concentration

The student is required to take the following 24 hours in the department: Math. 201, Calculus I; Math. 202, Calculus II; Math. 203, Calculus III; Math. 354, Linear Algebra; Math. 400, Abstract Algebra; Math. 401, Advanced Calculus.

The student also must complete a Senior Project. In addition, each student must complete one of the following tracks:

Mathematics: CS 142, 143, or 201; twelve hours from the following: Math. 326, 341, 344, 390, 383, 384.

Mathematics-Economics: Math. 231, 281, 282; Acct. 211; Eco. 200, 301, 302; CS 144 or 145.

Mathematics-Physics: Math. 341; Physics 201, 202, 251 or 261, 300; CS 142 or 143.

Mathematics-Computer Science: CS 201, 202, 290, 390; Math. 341.

Mathematics-Education: Math 103 (or high school equivalent), 104 (or high school equivalent), 201, 202, 203, 250, 281, 326, 354, 400, 401, 480; CS 140 or 201.

Only students who have completed the Mathematics-Education track will be recommended for state certification to teach mathematics in secondary school. See the Education Department listings for required Professional Education courses. Students must also complete the requirements of Mathematics MCE 5–8.

Math. 103 Elementary Algebra

4 hours

Designed to prepare the student to take Calculus I. Sets and operations on sets, numbers systems, solutions to equations, inequalities, functions and graphing, conic sections, synthetic division and the remainder theorem, exponential and logarithm functions, computation with common logarithms. (May not be taken if credit has been earned for Math. 201.)

Math. 104 Trigonometry

2 hours

Radian measure, trigonometric functions and their graphs, fundamental identities, conditional trigonometric equations, inverse trigonometric functions, vectors, complex numbers, trigonometric form of complex numbers. DeMoivre's Theorem.

Math. 141 Mathematics for the Liberal Arts Student

4 hours

Introduces the non-science major to the spirit and flavor of mathematics. Stresses fundamental concepts with the aim of clarifying the importance of mathematics in relation to other branches of knowledge. Topics that may be covered include sets, logic, the number concept, history of mathematics, the nature and use of geometry, computers, computer programming, and logical puzzles.

Math. 152 Finite Mathematics

4 hours

Intended primarily for students of the biological or social sciences. It is also recommended for non-science majors desiring an acquaintance with mathematics. It is not a precalculus course. Concepts studied include logic, set theory, matrices, probability theory, linear programming, and game theory.

Math. 201 Calculus I

4 hours

Real number system, equations of a line, study of the circle and parabola, functions, limits, and continuity. Techniques of differentiation and integration applied to maximum and minimum problems and to related rates. *Prerequisite: 3½ years of high school math or Math. 103 or permission of the instructor.*

Math. 202 Calculus II **4 hours**

Area between two curves, volumes of revolution, moments, centroids, hydrostatic pressure, and work. Integration and differentiation of transcendental functions. Methods of integration including integration by parts, partial fractions, and trigonometric substitution. Polar coordinates and graphs, area, and angles of intersection in polar coordinates. *Prerequisites: Math. 104 or high school equivalent; and Math. 201 or advanced placement.*

Math. 203 Calculus III **4 hours**

Intermediate calculus with emphasis on vector methods and functions of several variables. Scalar and vector products. Partial differentiation and applications, directional derivative and gradient. Multiple integrals with physical applications. Expansion of functions. L'Hopital rule, sequences, and series. *Prerequisite: Math. 202.*

Math. 210 Discrete Structures **4 hours**

Fundamental algebraic, logical, and combinational concepts of computer science. Topics include graph theory, monoids and finite automata, lattices and Boolean algebras.

Math. 231 Quantitative Methods in Management **2 hours**

This course deals with applications of matrix algebra to business and economics, including problems involving cost minimization and profit maximization. (The necessary matrix algebra will be developed in the course. Primarily designed for students who intend to pursue a career in business.) *Prerequisite: Math. 103 or equivalent.*

Math. 250 Mathematics for Early and Middle Childhood **4 hours**

A course designed in content and teaching style for early and middle childhood pre-service teachers. The course will emphasize active student participation and a field placement component which will permit the students to develop materials and evaluation instruments as well as practice the teaching of mathematics concepts including the structure of the number systems, real number properties and the computation derived from them, problem solving strategies, and geometry and measurement. (Required for Middle Childhood.) *Prerequisite: permission of the instructor. Not open to Freshmen.*

Math. 281 Statistical Methods I **4 hours**

Introductory statistical analysis including frequency distribution and graphic presentation of data, measures of central tendency, relative positions in a distribution, variability, the normal curve and its applications, correlation and regression, probability and statistical inference, testing differences between means, introduction to analysis of variance. (Not open to students in the general program.)

Math. 282 Statistical Methods II **2 hours**

Testing goodness of fit, contingency tables, regression and correlation analysis, analysis of variance, non-parametric methods.

Math. 326 Introduction to Modern Geometry **4 hours**

Euclidean and non-Euclidean geometrics; an introduction to synthetic projective geometry; the concept of limit and infinity; geometrical constructions, recent developments and theorems. *Prerequisites: Math. 201, 202, or permission of the instructor.*

Math. 341 Differential Equations **4 hours**

Methods of solution of ordinary and partial differential equations and applications to the physical sciences. *Prerequisite: Math. 202.*

Math. 344 Complex Variables **2 hours**

Complex numbers, elementary functions, analytic functions, contour integration, Taylor and Laurent series, conformal mapping, boundary value problems, Laplacian equations. *Prerequisite: Math. 203.*

Math. 354 Linear Algebra **4 hours**

Geometric vectors, matrices and linear equations, real vector spaces, linear transformations and matrices, and inner product spaces.

Math. 383 Probability & Statistics I	4 hours
Introduction to probability, basic distribution theory, limit theorems, mathematical expectation, probability densities, random variables, sampling distributions, point and interval estimation, tests of hypotheses, regression and correlation, analysis of variance. <i>Prerequisite: Math. 202 or permission of the instructor.</i>	
Math. 384 Probability & Statistics II	2 hours
In this course, the student will apply the concepts of probability to statistical procedures such as sampling estimations, tests of hypothesis, regression theory, and Bayesian methods. <i>Prerequisite: Math. 383.</i>	
Math. 390 Numerical Analysis	4 hours
Numerical methods in evaluating integrals and differential equations. Techniques in finding the roots of polynomials and solving systems of linear equations and matrix manipulation. <i>Prerequisites: CS 142, 143 or 201 and Math. 201, 202. (May be taken for credit as Computer Science 390.)</i>	
Math. 400 Modern Abstract Algebra	4 hours
Groups, rings, integral domains, fields, and vector spaces.	
Math. 401 Advanced Calculus	4 hours
The Jacobian, Lagrange multipliers, limits and continuity, completeness of the Real numbers, sequences, series, Fourier series and orthogonal functions, partial differential equations, Implicit Function Theorem. <i>Prerequisite: Math. 203.</i>	
Math. 478 Senior Seminar	2 hours
An examination of the historical development and cultural significance of mathematics. A study of modern trends in mathematical thought and application as revealed in the literature. An analysis of career opportunities in mathematics.	
Math. 480 Methods and Materials in Teaching Mathematics	2 hours
Approved methods in teaching mathematics at the secondary level; class period activities of the teacher; procedures and devices in teaching; organization of materials, testing, aims, and modern trends. (May be taken for credit as Education 480.)	
Math. 487-488 Independent Study	2 or 4 hours
Math. 490 Senior Project	2-8 hours.

Philosophy

Aims

To assist the student in discovering and developing sound bases for interpreting self and society through a careful examination of his or her beliefs, actions, and claims to knowledge; to assist the student in becoming aware of the nature and status of philosophical problems, commitments, ideologies, and models that serve as the foundation of human life; and to provide the student who expects to pursue graduate studies in philosophy with a sound basis in the major areas of the field.

Requirements for Field of Concentration

Concentration in philosophy may hold promise for several students as one way to achieve a liberal education. For others, philosophy may be an important related field; or it may serve as a good foundation for those planning for graduate work in another field as well as for those who are professionally interested in philosophy.

Concentration in philosophy requires satisfactory completion of a minimum of 24 hours, including Philosophy 123, 124, 323, 324, 325, plus a Senior Project, and Senior Comprehensive Examination. The Senior Project is received and evaluated in the final semester of the student's academic program. Related requirements are Interdisciplinary Studies 251, 252.

The student who is considering graduate work should be aware that many good graduate programs in philosophy require a reading knowledge of French and German.

Phil. 100 Introduction to Philosophy **4 hours**
Intended primarily to involve students in an introductory exploration into the range of problems with which philosophers wrestle. "Living issues" confront us in such vital areas as the nature of self, man, mind, values, knowing, freedom, and of philosophy, philosophic outlooks, and religious traditions.

Phil. 123 Basic Logic **4 hours**
Students are assisted in developing the ability to recognize the differences between emotional intensity and valid argument, between verbal disputes and conclusions that follow (logically) from premises. Recognition of the bases of these differences and development of the very practical abilities to recognize, construct, and analyze various forms of argument and to detect logical errors (fallacies) are important objectives of the course.

Phil. 124 Ethics: Personal and Social **4 hours**
Examination of different personal and social foundations upon which ethics or morals can be (and have been) built, such as pleasure, happiness, feeling, reason, obligation, usefulness, and relativism; significant moral problems in several areas of life and work; and basic criteria for moral decision-making.

Phil. 250-259 Special Topics in Philosophy **2 or 4 hours**

Phil. 252 Philosophy of Mysticism **4 hours**
Examination of what is involved in the experience and claims of several mystical groups or representatives, from ancient to contemporary times. Emphasis will focus on trying to understand the basic claims that mystics make, assessing the kinds of certainty, truth and insight claimed, and exploring the place of "the mystical" in human experience. (Offered in alternate years.)

Phil. 254 Contemporary Ethical Issues **4 hours**
Orientation to the relatively new attitude toward normative ethical issues; identification and examination of key normative concepts and principles (e.g., honesty, fidelity, loyalty; obligation; autonomy, dependence, paternalism; freedom; justice; self-respect and dignity; and rights) and problems that cut across several areas of social and professional life; and exploration of how these concepts and principles are involved in attempts to solve moral problems in the domains of social life and vocational life in, e.g., public policy, business, and mass communications. (Offered in alternate years.)

Phil. 323 Ancient and Medieval Philosophy **4 hours**
Begins with the seventh century B.C. Greek mythic interpretations and moves through early Nature Philosophies, Scepticism, Greek Humanism, the Golden Age, the Roman Period, and the relationship of religion and philosophy in the Medieval Period. (Offered in alternate years.)

**Phil. 324 Modern Philosophy:
From the Renaissance Through the 19th Century** **4 hours**
Begins with the New Learning and moves through the rise of "the scientific spirit," the development of British Empiricism and Continental Rationalism, Kant's "revolutionary" impact on philosophy, and the major thought forms of the 19th century. (Offered in alternate years.)

Phil. 325 Twentieth Century Philosophies **4 hours**
A survey of the dominant philosophic forms from Bergson, Dewey and Whitehead through the rise of realism, logical analysis, phenomenology-existentialism and language studies. (Offered in alternate years.)

- Phil. 350-359 Advanced Topics in Philosophy** **2 or 4 hours**
- Phil. 352 Natural Philosophy** **4 hours**
 Examination of man's changing ideas about the universe. Emphasis is placed upon the role of science as a social institution contributing to these changing beliefs. (Offered in alternate years. May be taken for credit as General Sciences 101.)
- Phil. 353 History and Philosophy of Science** **4 hours**
 Study of some of the major ideas conceived by western man in attempting to comprehend and describe the natural world. *Prerequisite: one year of college level science or permission of the instructor.* (Offered in alternate years. May be taken for credit as General Sciences 209.)
- Phil. 355 Philosophy of Religion** **2 or 4 hours**
 Examination of the major aspects of religion from a philosophic perspective. Study will include the religious experience, the meaning and significance of faith, belief and criteria, knowledge, proof, evidence and certainty, concept of deity, scope and impact of religion in human life. (Offered in alternate years.)
- Phil. 358 Aesthetics, The Arts, and Philosophy** **2 or 4 hours**
 Examination of the nature of aesthetic experience and its relation to other kinds of experience, as well as its place in art production, appreciation and creativity; the notion of "a work of art"; language used in description, interpretation, and evaluation of art; and different interpretations of aesthetics. Opportunities are provided for giving special attention to particular art areas as well as to "the Arts." (Offered in alternate years.)
- Phil. 477-478 Senior Seminar** **2 hours**
 This seminar seldom consists of a general review of all areas of philosophy; the topic or particular area of study is chosen as a result of student and faculty conferences. Student ability, interest, and need are important factors. *Conferences with and permission of the head of the department are required before enrollment.*
- Phil. 487-488 Independent Study** **2 or 4 hours each**
- Phil. 490 Senior Project** **2-8 hours**

Physical Education

Aims

To enhance the health of the student; to provide opportunities for students to participate and develop proficiency in sport activities; and to prepare students for careers in physical education.

Requirements for Field of Concentration

A minimum of 44 hours in the department, which must include P.E. 110, 210, 225, 226, 230, 231, 243, 244, 301, 302, 340, 426, 427, 480, 481; Bio. 100, 167; Ed. 201, 202; Sp. Ed. 205; the Professional Education sequence (see Education Department listings for the required professional education courses.)

- P.E. 100-165 Physical Education Performance Courses** **1 hour each**
 Skills in performances; knowledge of strategies, rules, equipment, and methods; participation in forms of sport. (Activity course: CR/NCR only.)

P.E. 110 Aquatics (Advanced Life Saving)	P.E. 155 Varsity Football
P.E. 135 Tennis - Badminton	P.E. 156 Varsity Golf
P.E. 139 Physical Fitness	P.E. 157 Varsity Soccer (M)
P.E. 150 Varsity Baseball	P.E. 158 Varsity Swimming (M&W)
P.E. 151 Varsity Basketball (M)	P.E. 161 Varsity Track (M&W)
P.E. 152 Varsity Basketball (W)	P.E. 162 Varsity Volleyball
P.E. 153 Varsity Cross Country (M&W)	P.E. 163 Varsity Softball
P.E. 154 Varisty Field Hockey	P.E. 164 Varsity Soccer (W)

P.E. 167 Introduction to Mammalian Anatomy and Physiology **4 hours**
Mammalian anatomy as exemplified in the cat. Discussion and study of the functioning of the tissues and organ systems of the human body, lab study of the anatomy of the cat, the human physiology. (Not open to students majoring in Biology. May be taken for credit as Biology 167.)

P.E. 206 Aquatics: WSI **2 hours**
Advanced swimming skills leading to Water Safety Instructor's certification.

P.E. 225 Health Education for Children **2 hours**
A study of aspects of health applicable to children in elementary and middle schools.

P.E. 226 First Aid as Related to the Principles of Biology **2 hours**
Emphasis is on the biological principles in the standard first aid and personal safety course of the American Red Cross. Red Cross certificates may be earned by those passing the examination. Opportunity for instructors' certificates will be presented as an option at the end of the course. (May be taken for credit as Biology 105.)

P.E. 227 Personal and Community Health **4 hours**
Fundamental knowledge of personal and community health matters pertaining to the social group: communicable diseases, vital statistics, and legal and social regulations.

P.E. 230 Lab Analysis – Team **2 hours**
Emphasis on skill development and analysis and cognitive acquisition of rules, equipment, strategies and methods. Sports covered include soccer, volleyball, field hockey, football, basketball, softball.

P.E. 231 Lab Analysis – Individual **2 hours**
Emphasis on skill development and analysis and cognitive acquisition of rules, equipment, strategies and methods. Sports covred include archery, badminton, dance, golf, tennis, track and field.

P.E. 243 Socio-Psychological Perspective **4 hours**
Consideration of small sport groups as micro-social systems; application of group dynamics theory and small group research to the study of sport groups; investigation of the influence of group member characteristics, environmental factors, interpersonal relations, and group structural characteristics on individual member adjustment and group effectiveness. Designed to investigate those aspects of psychology which influence the performance and the participant in sport. Additional factors such as motives, arousal, aggression, and other socio-psychological variables will be covered.

P.E. 244 Philosophical-Historical Perspective **4 hours**
Philosophical inquiry into physical education. Consideration given to general philosophical interpretation of the nature and purpose of physical education. Review of the historical and philosophical changes in American education with emphasis on the developing roles of professional physical education.

P.E. 300-308 Clinics **2 hours each**
These courses prepare students to teach particular sports at any level within the school environment. Emphasis is on the theory of the sport and on methodologies for teaching it.

P.E. 301 Football, Basketball, Baseball, and Softball

P.E. 302 Soccer, Volleyball, and Track and Field

- P.E. 309 Intramural Sports** **2 hours**
 Organization, administration, and objectives of the intramural athletic programs.
- P.E. 340 Prevention and Care of Injuries** **2 hours**
 Common hazards of play and athletics. Preventive measures and treatment of injuries. Red Cross First Aid Certificate may be earned by those who pass the examination. Laboratory fee: \$30.
- P.E. 341 Advanced Athletic Training** **4 hours**
 Major emphasis is placed on those skills needed by personnel involved in the field of sports medicine. Orthopedic evaluations of injuries, treatment of crisis situations, and study of conditioning and rehabilitation programs will be covered. *Prerequisites: P.E. 340, 426, 427. Laboratory fee: \$30.*
- P.E. 355 Coaching Sport** **2 hours**
 Basic philosophy and principles of athletics as integral parts of physical education and general education. State, local and national regulations and recommendations related to athletics; legal considerations; function and organization of leagues and athletic associations; personal standards and responsibilities of the coach as a leader; public relations; general safety procedures; general principles of budgets, records, purchasing and facilities.
- P.E. 426 Kinesiology** **2 hours**
 Anatomy and mechanics applied in the study of the human body during physical exercise; with special emphasis on the analysis of motion in specific sports skills and exercise patterns. *Prerequisite: Biology 167.*
- P.E. 427 Physiology of Muscular Activity** **2 hours**
 Anatomy and physiology applied in the study of the human body during physical exercise; with special emphasis on the application of physiological variables in specific sports skills and exercise patterns. *Prerequisite: Bio. 167.*
- P.E. 480 Teaching Physical Education** **4 hours**
 Analysis of current methods, materials and techniques pertinent to teaching and administering physical education and athletics. Development of an understanding of the formative and summative evaluation process in the cognitive, affective and psychomotor domains of physical education. Emphasis is given to data-collection techniques (measurement), data-manipulation (statistics), data evaluation and data interpretation in view of teaching. Integration of administrative processes and techniques with teaching and evaluation.
- P.E. 481 Elementary School Physical Education** **2 hours**
 Teaching physical education at the elementary level. A study of this age group's physical, motor, social and emotional development, plus activities contributing to proper physical development.
- P.E. 487-488 Independent Study** **2 or 4 hours each**
- P.E. 490 Senior Project** **2-8 hours**

Physics

Aims

To introduce students to the current body of knowledge expressing the physicist's concepts of the universe and its physical laws; to provide courses serving the needs of liberal arts students who are concentrating in physics or are interested in the physical and life sciences, medicine, optometry, therapy, engineering, or teaching. Students may choose from a variety of courses to satisfy a distribution requirement, to attain enough competence for a future career in a related field, or to attain sufficient breadth and depth to pursue an advanced degree in physics.

Requirements for Field of Concentration

A minimum of 36 hours in the department, including Physics 201, 202, either 221 or 222, 251, 261, 300, 303, 314, 316, 318 and either 305 or 306, plus a Senior Project. Those students expecting to do graduate work are urged to take both 221 and 222 and both 305 and 306.

A combined plan with Case Western Reserve University, Columbia University, a dual-degree program with Georgia Institute of Technology, and a Three-Two Plan with Washington University are available to students interested in various engineering or industrial management degrees. Special programs are offered in cooperation with the Education Department for students interested in meeting the demand for teachers of physics, particularly in upper middle and secondary schools. Only students who have completed the following courses or their equivalents will be recommended for state certification to teach physics in the secondary school: Physics 201, 202, 221, 251, 261, 300, 318, and either 305 or 306; C.S. 480. See the Education Department listings for additional required courses in that department. Additional courses in Computer Science, General Science and Physics are suggested for additional interest.

Students interested in careers in engineering, industrial management, mathematical modeling, etc., which might require a background in physics-mathematics-economics-chemistry, are encouraged to speak to the appropriate department head and the director of the dual degree engineering program, or to the director of interdisciplinary studies if they wish to design an interdisciplinary program of study more suited to their career goals than a traditional departmental program.

Phys. 100 Everyday Physics

4 hours

This course is designed for non-science students. A study from non-technical, non-mathematical viewpoints of the aims, methods (experimental and theoretical) and achievements in the attempts to understand the basic principles governing the physical world. The course begins with commonplace observations and concrete examples and then proceeds to generalizations and hypotheses that unify these observations.

Phys. 201-202 General Physics

4 hours each

First Semester: mechanics, heat, and wave phenomena. Second Semester: electricity and magnetism, light and selected topics in atomic and nuclear physics. Specifically intended for science, engineering, and other students who have had or are concurrently taking calculus. (Three hours of lecture and three hours of lab each week.)

Phys. 221 Introductory Electronics

4 hours

Introduction to electrical and electronic circuits and their elements, with an emphasis on applications. *Prerequisite: Phys. 201-202, or permission of the head of the department.*

Phys. 222 Digital Electronics

4 hours

An introduction to digital electronics with applications in instrumentation and computer electronics. Topics include Boolean Algebra, basic gates, logic families, encoders-decoders, astable/monostable multivibrators, flip-flops, counters, readouts, shift registers, bi-directional bus structure, serial-parallel/parallel-serial data conversion, D to A and A to D conversion. (Three hours of lecture and two hours of lab each week. May be taken for credit as Computer Science 222.) *Prerequisite: Math. 103 or equivalent or permission of the head of the department.*

Phys. 251 Mechanics

4 hours

Particle mechanics, central force motions, motions of rigid bodies, free, forced and coupled oscillations, rotations about an axis, moving coordinates systems, conservation theorems, Lagrange's equations, relativistic mechanics, mechanics of continuous media, and theory of small vibration. *Prerequisite: Physics 201-202.*

Phys. 261 Electricity and Magnetism

4 hours

Electrostatics, magnetostatics, scalar and vector fields, Poynting's vector, electrodynamics, Maxwell's equations, boundary conditions, and wave propagation. *Prerequisite: Phys. 201-202.*

- Phys. 300 Modern Physics** **4 hours**
A presentation, based on mathematical and physical reasoning, of the foundations of modern physics. Treats the subjects of special relativity, kinetic theory, atomic theory, and introductory quantum mechanics on the level of the Schroedinger equation. (Intended for chemistry, mathematics, physics, or pre-engineering majors.) *Prerequisite: Phys. 201-202 or permission of the head of the department.*
- Phys. 303 Statistical Thermodynamics** **4 hours**
Study of macroscopic systems of many atoms or molecules which provides an introduction to the subjects of statistical mechanics, kinetic theory, thermodynamics, and heat. *Material emphasizes concepts useful to those majoring in physics, chemistry, and pre-engineering. Prerequisite: Phys. 201-202.*
- Phys. 305 Geometric Optics** **2 hours**
The study of light from a non-wave theory standpoint. This course includes the study of reflection, and optical instruments. *Prerequisite: Phys. 201-202 or permission of the head of the department.*
- Phys. 306 Physical Optics** **2 hours**
Topics covered in this course include interference dispersion, diffraction, polarization, electromagnetic nature of light, and quantum optics. *Prerequisite: Phys. 201-202.*
- Phys. 307 Heat and Thermodynamics** **2 hours**
A study of macroscopic properties of matter from a thermodynamic point of view. Topics: equation of state, the first law of thermodynamics and its consequences, entropy and the second law of thermodynamics, thermodynamic potentials and applications of thermodynamics to simple systems. *Prerequisite: Phys. 201-202.*
- Phys. 308 Statistical Thermodynamics** **2 hours**
A study of how the microscopic properties of a system can be determined using the methods of kinetic energy and statistical mechanics to calculate the dependence of the macroscopic properties of a system on thermodynamic variables. The Bose-Einstein and Fermi-Dirac statistics will be discussed and applied to different systems. *Prerequisite: Phys. 307.*
- Phys. 314 Introduction to Classical Quantum Mechanics** **2 hours**
Continuation of the study of classical quantum mechanics begun in Phys. 300. Topics include the three-dimensional Schroedinger equation, selection rules, addition of angular momentum, fine structure in hydrogen, exchange symmetry, the Zeeman effect, and stimulated emission. *Prerequisite: Phys. 300 or permission of the head of the department.*
- Phys. 316 Selected Topics in Solid State and Nuclear Physics** **2 hours**
Continuation of the study of modern physics. Topics include molecular bonding and spectra, free-electron theory of metals, band theory of solids, superconductivity, nuclear shell model, radioactivity, nuclear reactions, and elementary particles. *Prerequisite: Phys. 314 or permission of the head of the department.*
- Phys. 318 Advanced Physics Lab** **2 hours**
Experiments concerning topics covered in Phys. 300 are emphasized.
- Phys. 477 Seminar in Physics** **2 hours**
Survey of physics for review and correlation of various fields within the discipline. *Prerequisite: Permission of the head of the department.*
- Phys. 480 Methods and Materials in Teaching Physical and Life Sciences** **4 hours**
For course description see General Sciences 480. (May be taken for credit as Education 480.)
- Phys. 487-488 Independent Study** **2 or 4 hours each**
- Phys. 490 Senior Project** **2-6 hours**
Research problems in theoretical or experimental physics. Experimental physics if offered in such areas as vacuum systems, machine tool operation, electron systems, spectroscopy, electron microscopy, microwave propagation, nuclear radiation and computer science. Theoretical physics projects are unlimited in scope and are arranged through consultation with the student's faculty advisor.

Politics and Public Policy

Aims

To provide for the study of American politics, political institutions and processes, patterns of political behavior, and international relations, and how these areas are related to the making of public policy; to prepare students for graduate or professional school; to enhance the career objectives of students in the theoretical, technical, and practical dimensions of administration, management, and policy in both the public and private sectors.

Requirements for Field of Concentration

Students are required to complete a minimum of 38 hours in the department exclusive of the Senior Project. All students will complete Pol. 225 and Pol. 478 plus at least 16 additional hours of classroom based courses and at least a 4-hour Internship. Related requirements are History 201-202. Cognate courses are recommended in History, Philosophy, Economics and Business, Sociology, Foreign Languages, Communications, Mathematics (especially statistics), Computer Science, and selected areas of science and technology.

Pol. 225 American Government

4 hours

Introduction to the formal and informal structures, institutions and processes which comprise the American political system at the national level.

Pol 227-228 Intergovernmental Relations

4 hours

Covers introductory material on state and local governments, including U.S. constitutional provisions about states, varieties of state constitutions, typical powers of governors, state legislatures and state executive agencies, the arrangement of state courts and their importance. Major program responsibilities of state and local governments will also be covered. Examines the development of the federal-local relations. The major topics included are joint programming, the grant-in-aid system, revenue sharing, and current issues and proposals regarding federal and state program responsibilities. The implications of federal decisions for states and local governments are also included.

Pol. 231 The Politics of Public Policy

4 hours

Examines selected models and approaches to the study of public policy. While providing an overview of the policy process, the focus of attention will be upon how public issues arise, how they are placed upon the public agenda, and how they are kept off that agenda. Selected case studies of public policy making will be analyzed.

Pol. 232 Public Policy Formation

4 hours

Focuses on the development of proposed courses of action for dealing with public problems. Examines the sources of policy proposals, the criteria used by individuals in making choices and the mobilization of support for the policy choice. Special attention will be paid to the role of the policy analyst and the ethical dimensions of policy choice.

Pol. 243 International Politics

4 hours

Analysis of the factors involved in the relations among states, traditionally and in a global perspective. This analysis is applied to theoretical, historical, and current political and political economic situations.

Pol. 288 The American Political Novel **2 hours**
Political life in the United States at the municipal, state, and federal level as reflected in a number of political novels since 1932. The course examines *Grapes of Wrath*, John Steinbeck; *It Can't Happen Here*, Sinclair Lewis; *All the King's Men*, Robert Penn Warren; *The Last Hurrah*, Edwin O'Connor; and *Advise and Consent*, Alan Drury, plus an additional book selected for each student. (May be taken for credit as History 288.)

Pol. 300 Public Administration **4 hours**
An examination of the basic concerns of American public agencies, principally federal; problems of planning, organization, staffing and efficiency; problems of their proper place in the political arena; problems of relating democratic principles of administrative actions.

Pol. 311 Public Budgeting Process **4 hours**
This course examines the process and politics of budgeting in the federal government, with some attention to state and local budgeting problems. The role of the President and the executive branch in budgeting, congressional processes for budget approval, and the implementation of the budget are studied in depth. Recent budgeting systems used in the federal government are included, as well as examination of the importance of budgeting to overall program and policy development in government. Students will critique an actual public budget as part of the course.

Pol. 320 Legislative Process **4 hours**
The course deals with the role of Congress in federal policy-making. The constitutional powers of Congress are examined, but the primary emphasis is on the influences on Congress and its organization for decision-making. The importance of constituents, the executive branch, political parties, colleagues, congressional committees and the media are all included. Some attention is also given to state legislatures.

Pol. 321 Executive Leadership **4 hours**
This course focuses on the roles of the President, governors, mayors and other political executives in the American political system. The constitutional powers, historical development, and current responsibilities and problems of the presidency are examined. The President's relations with Congress, the courts, the bureaucracy, the press and the public are also included. Similar issues are examined with respect to governors and local government executives, with emphasis on the variety of powers and approaches possible for state and local executives. Students will examine the career and contributions of one political executive as part of the course.

Pol. 322 Judicial Behavior **4 hours**
The role of the courts in the political process and as policy-makers will be a focus of study. Various approaches to the understanding of the behavior of judges and legal system actors will be examined. The influence of values, social background factors, professional socialization, small group dynamics, role perceptions, interest group interaction and recruitment and selection processes on judicial and legal actor decision-making will be studied. The problems of the impact of and compliance with judicial decisions will be examined.

Pol. 325 Political Economy **4 hours**
An examination of the links between the economy, polity and policy. A particular focus will be on the role of government in the allocation of goods, especially public goods. Basic socio-economic decision-making mechanisms will be critically analyzed, including the market, government, hierarchy and bargaining. A variety of political economic approaches will be examined including traditional economic, non-economic and Marxist approaches.

Pol. 328 Comparative Government **4 hours**
Survey of the major approaches to the study of political systems with attention to their similarities and differences. Focuses on such approaches as historical, ideological, structural, functional, whole systems and political economic. Liberal democratic, communist and Third World systems will be examined in terms of the whole historical systems approach. Students will undertake comparative case studies.

Pol. 331 Public Policy Implementation **4 hours**
The analysis of the systemic, organizational and personal factors influencing the behavior of factors who have authority to carry out policy directives. In addition, the influence of intermediaries, administrative lobbies, issue networks, recipients-clients, the media and policy evaluators on the implementation of public policy will be studied. Legal, bureaucratic, and per-

sonal imperatives affecting the composition and interaction of actors in relation to specific policies will be examined.

Pol. 332 Public Policy Evaluation

4 hours

This course focuses on the ways in which public programs are evaluated. It examines who does evaluation and the types of evaluation methods that may be used. Students will critique and design policy evaluations as part of the course.

Pol. 339 American Political Parties and Interest Groups

4 hours

Study of major and minor political parties in the U.S. Attention is given to the history, structure, functions, tactics, and financing of political parties in a democratic system, as well as to the American electoral process; and a brief look at foreign party systems. The role of interest or pressure groups in a democratic pluralist society is also given major attention. *Pol. 225 or Hist. 201-202 are recommended for background in the field.*

Pol. 341 U.S. Foreign Policy

4 hours

Examination of the personalities, assumptions, and mechanics behind the making of U.S. foreign policy since World War II. The material provides a framework for analyzing and evaluating various interpretations of national security and subsequent international commitments. Reference is made to particular examples of foreign policies, such as the Truman Doctrine, Korea, Vietnam, and Sino-American and U.S.-Soviet relations.

Pol. 357 History of Political Philosophy

4 hours

Survey of the major literature in the evolution of political philosophy from the classical period to Karl Marx. A special effort is made to relate the principal concepts in political philosophy, such as justice, freedom, and equality, to contemporary politics.

Pol. 465 Constitutional Law

4 hours

Study of the judicial elaboration and interpretation of the U.S. Constitution. A case study approach to the historical development of American constitutional principles. *Pol. 225 or Hist. 201-202 are recommended for background in the field.* (May be taken for credit as History 465.)

Pol. 468 Revolution and Reaction in Modern History

4 hours

Comparative study of the English, American, French and Russian revolutions. Emphasis is placed on the origins and characteristics of revolutions, the roles of revolutionary leaders, and the relationship of the 17th, 18th, and 19th century revolutions to contemporary struggles in the third world. (May be taken for credit as History 468.)

**Pol. 470 Internship in Politics,
Public Administration and Public Policy**

2-8 hours

A faculty supervised off-campus learning experience for a student concentrating in politics with an academic dimension involving off-campus work and a substantive research project. A faculty member must approve the internship experience and the projected academic research work prior to the student's beginning the internship experience. Off-campus work will be jointly supervised by the faculty member and an approved off-campus mentor. The student will be evaluated by the faculty supervisor who may take into consideration an evaluation of the student's performance by the off-campus mentor. In all cases an internship project must be submitted for evaluation by the student in order to successfully complete the requirements for the internship.

Pol. 478 Research Methods in Political Science

4 hours

Consideration of the scope of political science through a survey of the prominent research in the field. Attention will be given to the "scientific" dimension of this work including reference to computer-assisted political analysis.

Pol. 487-488 Independent Study

2 or 4 hours each

Pol. 490 Senior Project

2-6 hours

Begins first semester of the senior year.

Psychology

Aims

To assist the student in gaining a basic knowledge of psychology as the science of human behavior; to foster development of social awareness and social adjustment through an understanding of the fundamental similarities and differences among people; to encourage both original and critical thinking; and to give background preparation for professions which deal with individual and group behavior.

Two Plans of Concentration

Two plans of concentration are offered — one leading to the Bachelor of Arts degree and the other to the Bachelor of Science degree.

The Bachelor of Science plan is designed for students most interested in the scientific aspects of psychology, particularly for those who are considering graduate work in experimental or clinical psychology. Most Ph. D. programs in experimental or clinical psychology require the types of undergraduate courses included in the Bachelor of Science plan.

The Bachelor of Arts plan is flexible, and can be designed to meet the needs of students who wish to pursue masters-level education in a variety of fields, such as counseling, organizational psychology, and guidance, desire a broad undergraduate education and graduate education in areas outside of psychology, such as business, law, and education, or seek a broadly applicable undergraduate degree.

Requirements for the Bachelor of Arts Degree

The Bachelor of Arts degree requires a minimum of 24 hours in the department (including Psychology 100, 103, 399, 415, and 477) plus a Senior Project. Depending upon the direction of the student's interests, the department sees as particularly useful and relevant courses in sociology, social work, philosophy, child and adolescent development, biology, and the history of scientific thought.

Requirements for the Bachelor of Science Degree

The Bachelor of Science degree requires a minimum of 30 hours in the department, including Psychology 100, 103, 311, 312, 399, 415, and 477, as well as a Senior Project. Six hours are also required in natural science. Two of these must either be in physiological psychology (Psychology 335) or in biology courses stressing animal biology, physiology, or genetics. The remaining four hours may be in similar biology courses, physics, or chemistry (including Chemistry 100.)

Students planning on graduate school in psychology are also advised to take at least one course in calculus and to obtain some skills in computer use. It should also be kept in mind that most graduate schools require Ph. D. candidates to show a reading knowledge of one or two foreign languages, usually French, German, or Spanish.

Psych. 100 General Psychology

4 hours

Introduction to the general field of psychology, including learning, motivation, sensation, perception, cognition, personality, abnormal behavior, testing, physiological psychology, and social psychology.

Psych. 103 Quantitative Methods in Psychology **4 hours**

An introduction to the basic problems and techniques of measurement in psychology and to basic statistical techniques used in psychological research. This course also includes an introduction to designs for research and experimentation.

Psych. 186 Psychology of Consciousness **2 hours**

Consideration of the nature of human consciousness, concentrating upon both normal consciousness and altered states of consciousness resulting from dreams, hypnosis, biofeedback, drugs, and meditation. Emphasis is given to recent explorations concerning two major modes of consciousness: the intellectual and the intuitive.

Psych. 275 Student Development in Higher Education **2 hours**
(See Education 275.)

Psych. 287 Organizations and Human Behavior **4 hours**
(See Econ. 287.)

Psych. 311 Experimental Psychology I **4 hours**

Encourages the student to become conversant with the basic factual and theoretical content of experimental psychology at an intermediate level, and to engage in experimental work in the areas of sensation, perception, and cognitive processes. Some familiarity with computers is highly desirable. *Prerequisites: Psych. 100, 103.*

Psych. 312 Experimental Psychology II **4 hours**

Continuation of Psych. 311, covering the areas of learning, perceptual-motor skills, and motivation. *Prerequisites: Psych. 100, 103.*

Psych. 315 Modification of Behavior **2 hours**

The course has two main aims: to help the student learn systematically to analyze behavior in terms of reinforcement principles and to help the student develop skills in the application of these principles to the modification of behavior in practical situations. Examples of the latter arise in the areas of behavior disorder, child-rearing, the work situation, and habit change.

Psych. 324 Personality: Theory and Application **4 hours**

Covers major theories of personality and principles of personal adjustment and growth, including development, motivation, dynamics, problems in group living, and intellectual, emotional, and social adjustment. The course should be valuable to the potential doctor, nurse, social worker, child-care worker, teacher or parent.

Psych. 325 Abnormal Psychology **4 hours**

The development, dynamics, social significance, and theoretical implications of defiant behavior. While the traditional psychiatric diagnostic categories are studied, there is a strong emphasis upon alternative approaches in the medical model of abnormality. The concepts of normality and abnormality in relation to cultural norms and stereotypes are examined in depth. The course should prove particularly useful to students planning on a career in the helping professions.

Psych. 326 Experimental Social Psychology **4 hours**

Aspects of social behavior and specific social issues are examined within the context of theory and experimental research. Topics include social factors in the development of morals; cooperation and competition; aggression; racial and social-class differences in personality, motivation, and language; attitudes and attitude change; authoritarianism and obedience; interpersonal and group processes (affiliation, attraction, perception, conformity, and leadership); and discussion of drug and sex issues.

- Psych. 327 Seminar in Theories and Techniques of Psychotherapy and Counseling** **4 hours**
Provides the student with a basic knowledge of the varied theories and techniques used in professional psychotherapy and counseling. Both academic and experiential learning are included, which should be particularly useful to students interested in going on into one of the helping professions such as clinical psychology, psychiatry, social work, school psychology, counseling, or occupational therapy. *Prerequisites: Psych. 100 and 324 or 325 plus permission of the instructor.*
- Psych. 328 Human Sexuality** **2 hours**
Examination of the various psychological, biological, social, comparative, legal, and ethical aspects of human sexuality. In addition to sexual anatomy, physiology, birth control, and sexually transmitted disease, the course takes up current issues such as sex-role development, and sex therapy. (May be taken for credit as Education 328.)
- Psych. 335 Biological Bases of Behavior** **2 hours**
Examines the neural and biochemical substrates of the more important aspects of animal and human behavior. *Prerequisite: Psych. 100.*
- Psych. 399 Junior Preparation** **4 hours**
This course is designed to help students round out their background in the content and methods of psychology in preparation for their senior year. An intensive review of the various fields of psychology is undertaken and methods of field research and program evaluation strategies are studied.
- Psych. 410 Tests and Measurements** **2 hours**
(See Sp. Ed. 410.)
- Psych. 415 Systematic Psychology** **4 hours**
Examination of the systematic positions and theories that have been important in the history of psychology, as well as a brief review of the philosophical bases underlying these positions.
- Psych. 477 Senior Seminar** **2 hours**
An introduction to professional opportunities in psychology and related fields and an exploration of value and ethical consideration. Continued guidance on senior project and senior comprehensive examinations also will be provided during the course.
- Psych. 480 Methods and Materials in Teaching Psychology** **4 hours**
Study of the methods and materials used in teaching psychology in the secondary school. The course has a systematic and experimental emphasis. *Prerequisite: 16 hours of psychology.* (May be taken for credit as Education 480.)
- Psych. 487-488 Independent Study** **2 or 4 hours each**
- Psych. 490 Senior Project** **2-8 hours.**

Religious Studies

Aims

The department desires to continue the historic interest of the College in the intellectual, spiritual, and social development of the community. Students are encouraged to join in the exploration of thought and research in the field of religious studies. Biblical studies form the central core of departmental offerings. In addition, each

student also examines the relationship between religion and culture (both ancient and modern). The personal integration of knowledge and faith for an understanding and appreciation of value systems is a conscious goal of the department.

The department's aims are future-oriented. Rather than teaching a particular point of view, the department seeks to assist the student in learning how to acquire, evaluate, and use religious knowledge. Each course is consciously designed to enhance the student's efforts to interrelate his or her varied academic, social, and personal experiences.

Requirements for Field of Concentration

A minimum of 28 hours (excluding Religious Studies 100) in the department, a Senior Project, and the successful completion of the Senior Comprehensive Examination constitute the stated requirements of the department. Related requirements are Interdisciplinary Studies 251, 252.

The Comprehensive Examination in Religious Studies emphasizes Biblical studies, comparative religions, and contemporary religious thought and culture. All students completing a successful Religious Studies major will be expected to complete R.S. 300 and four additional hours of advanced Old Testament study, R.S. 311 and four additional hours of advanced New Testament study, four hours in world religions (R.S. 341, or 342, or 352), four hours in contemporary religious thought (R.S. 336, or Phil. 325 or Phil. 355) and four hours of religion and society (chosen from R.S. 360, or R.S. 383, or Soc. 356 or Phil. 124).

Students electing the field of religious studies are strongly urged to develop a proficiency in one or more foreign languages, to formulate a related field of concentration and to consider spending at least one semester in study abroad.

R.S. 100	Judaeo-Christian Heritage and Contemporary Living	4 hours
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Study of the Judaeo-Christian heritage with the aim of understanding how Biblical writers reflect on the basic human and social issues which continue to engage contemporary people. Study is done within a triple context: (1) the Biblical tradition; (2) the liberal arts tradition of Bethany College; and (3) contemporary questions.

R.S. 300	Old Testament Literature and Thought	4 hours
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Study of the development of Israelite religion and its institutions, the history of the various types of Old Testament literature, and the thought and theological motifs of Old Testament writers. Students will be assisted in acquiring a developmental understanding of Old Testament religion and an appreciation of its continuing value. *Prerequisite: R.S. 100 helpful, but not required.*

R.S. 302 Wisdom Literature **2 hours**

Critical and appreciative reading of the literature of the Old Testament wisdom school (Proverbs, Job, and Ecclesiastes). Students are assisted to understand the ways in which the wisdom school sought to understand human meaning and destiny.

R.S. 304	Mission and Message of the Prophets	2 hours
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Critical and appreciative reading of selected writings of the classical prophets of ancient Israel (Amos, Hosea, Isaiah, Jeremiah, and Ezekiel). Students are assisted to understand the major ideas of the prophets and the relationship of these ideas to the issues facing both ancient and modern people.

R.S. 310 New Testament Literature and Thought 4 hours

Study of the development of earliest Christianity (A.D. 30-125) and its institutions, the history of various types of New Testament literature, and the thought and motifs of various New Testament writers. Students will be assisted in acquiring a developmental understanding of the New Testament and an appreciation of its continuing value. *Prerequisite: R.S. 100 helpful, but not required.*

- R.S. 311 Studies in the Gospels** **4 hours**
Students are assisted in developing the means to discern the message of the different gospel writers. While concentrating on the Gospel of Mark, the course equips the student to do basic study in any of the Gospels. *Prerequisites: R.S. 100 and permission of the instructor.*
- R.S. 312 The Pauline School** **4 hours**
Students are assisted in developing an understanding of the Apostle Paul as a man, his thought, his place in early Christianity, and thoughts of his disciples and his opponents. *Prerequisites: R.S. 100 and permission of the instructor.*
- R.S. 313 Apocalypticism** **4 hours**
Students are assisted in developing a facility to understand the messages of Daniel, the Revelation of St. John and other apocalyptic materials, to explore the history of apocalyptic imagery and literary relationships, and to discover the backgrounds and causes of the rise of the apocalyptic movement.
- R.S. 314 The Gospel of John** **2 hours**
The student will study the Fourth Gospel as an important document in the history of religions, as a special literary form and composite, as a witness to the historical Jesus, and as a continuing witness to faith and to the meaning of human existence.
- R.S. 322 Sociology of Religion** **4 hours**
Formal religion and its functional equivalents both in primitive and modern societies. The relationship between religion and other social institutions. Religion and social change. (May be taken for credit as Sociology 356.)
- R.S. 336 20th Century Protestant Thought** **4 hours**
Students read and discuss the work of leading 20th century Protestant thinkers such as Paul Tillich, Karl Barth, Dietrich Bonhoeffer, and the Niebuhrs.
- R.S. 341 The Religions of India** **4 hours**
Students explore the chief features of Indian religion. The course begins with an examination of Hinduism and includes a survey of the origins of Buddhism and a study of Indian Islam and Sikhism.
- R.S. 342 The Religions of China** **4 hours**
Students explore the chief features of Chinese religion. The course begins with a consideration of the most ancient features of Chinese religion, continues with a study of the historical development of Confucianism, Taoism, and Chinese Buddhism and concludes with an analysis of the influence of religion on Chinese society.
- R.S. 351 Ancient Near Eastern Civilization** **4 hours**
This course introduces the students to the historical development of life, culture, and religions of Mesopotamia, Egypt, and the Syro-Phonecian coast, including international relations from pre-history to Alexander the Great. (May be taken for credit as History 351.)
- R.S. 352 Islamic Civilization** **4 hours**
Study of the life and background of the prophet, the *Qur'an*, the development of Islamic thought, and the early Islamic empires.
- R.S. 353 Hellenistic Civilization** **4 hours**
Development of an acquaintance with the Graeco-Roman Oriental world based on a survey of social and cultural developments from Alexander the Great to Julius Caesar. (May be taken for credit as History 353.)
- R.S. 361 American Catholicism** **2 hours**
A descriptive study of contemporary American Catholicism and its roots. The course emphasizes such topics as modern Catholic worship, the crisis of authority, the "immigrant church," the church and political life, Catholic education, and the charismatic movement.
- R.S. 362 American Judaism** **2 hours**
A descriptive study of contemporary American Judaism and its roots. The course emphasizes the life-cycle customs of Judaism. Jewish holidays are studied in the context of Jewish history. The course seeks to develop a broader understanding of the modern Jewish community in the United States and is supported by a grant from the Jewish Chautauqua Society.

- R.S. 363 Alexander Campbell and His Reformation** 4 hours
Students will study the backgrounds, life, thought and historical contexts and outcomes of Alexander Campbell, his colleagues and successors. Lectures, debates, multi-media materials and field work will be included. Special emphasis will be placed on primary sources and each student will complete a satisfactory primary research project.
- R.S. 370 Renaissance and Reformation History** 4 hours
The course will trace briefly the development of the Renaissance and will concentrate on the chief reformers of the sixteenth century — Zwingli, Luther, and Calvin.
- R.S. 373 History of Early Christianity** 4 hours
Introduction to the origins and expansion of Christianity from the period of Augustus Caesar to Constantine. The problems of institutions, consolidation, varieties, division, and unification will be explored in historical context.
- R.S. 374 History of Eastern Christianity** 4 hours
A study of the development of the Eastern Roman Empire and Byzantine Christianity from Constantine to the fall of Constantinople. Special attention will be given to the Eastern Fathers in both the Greek and Semitic developments of the church.
- R.S. 376 History of Medieval Christianity** 4 hours
Examination of the major developments within European Latin Christianity between the sixth and fourteenth centuries. Topics covered include: the conversion of Europe; relationships between church and state; contacts and conflicts with Byzantine Christianity and Islam; monasticism; the development of theology and Christian culture; reform; dissent; heresy and schism.
- R.S. 380 Ethics and Society** 4 hours
Studies in contemporary social-ethical and public policy issues from the perspective of classical and modern Judaeo-Christian thinking. Topics such as political and economic justice, war and peace, revolutionary movements, and environmental policy will be included. (No prerequisites, although completion of R.S. 100 is desirable.)
- R.S. 381 Church Leadership Practice** 2 hours
Development of an understanding of the theory and practice of public worship, preaching, and church program planning.
- R.S. 382 Cultural Life in the Middle East and North Africa** 4 hours
Study of the cultural developments and impact of Islamic civilization, including religion, art, literature, philosophy, and law. (May be taken for credit as History 382.)
- R.S. 383 Introduction to Bioethics** 4 hours
Consideration of the religious and ethical dimensions involved in human decisions concerning abortion, artificial birth control, genetic planning, euthanasia, organ transplants, medical experiments on human subjects, and various forms of behavior modification.
- R.S. 487-488 Independent Study** 2 or 4 hours each
- R.S. 490 Senior Project** 2-8 hours

Science Applications (Honors)

Aims

The Honors Program in Science Applications prepares students in the current theoretical and applied knowledge, skills, and techniques of applied sciences and engineering design; provides an engineering and scientific foundation for applied research through integrated studies in the physical and life sciences, mathematics, and computer science; produces a graduate with science and engineering preparation for graduate schools and corporate, industrial, and government research career options; achieves a combined technical and liberal arts education serving future career advancement in technological leadership roles.

Requirements for Field of Concentration

Admission to this program is selective. All students in the program are required to complete a common base of 40 hours, including Chemistry 101-102, Physics 201-202, 222, Computer Science 150 or 201, 202, Mathematics 201-202 and 341. In addition, all students will complete 8 hours of a common, upper-level, applied research and design component consisting of an Internship, a Research and Applications course, and a Senior Project; these are, respectively, Science Applications 470 (2 hours), 475 (4 hours), and 490 (2 hours).

All students will also elect one of the following options: 1) For the degree in Science Applications, 24 hours of course work selected from the courses listed below, at least 12 of which must be chosen within a single area as listed. 2) For the degree in Chemistry, Mathematics, Computer Science, or Physics, 24 hours within the appropriate listing of courses for that field. (Biochemistry is part of the Science Applications degree program but is not a separate field of concentration.)

Chemistry 211-212, 322, 324, 326, 404, 414.

Mathematics 203, 344, 354, 383-384, 390, 401.

Computer Science 222, 280, 290, 330, 370, 380, 390; **Mathematics** 354, 383.

Physics 251, 261, 300, 303, 305-306, 314, 316, 318.

Biochemistry: Biology 210, 290, 343, 425, 467; Chemistry 211-212, 314.

It is recommended that students in the program also complete a Professional Core in Management, Public Affairs, or Communication.

S.A. 470 Internship in Science Applications **2 hours**

A faculty supervised, off-campus industrial work experience, co-sponsored and coordinated with a participating industry. *Prerequisites:* Junior standing and approval of the Director of the Honors Program in Science Applications.

S.A. 475 Research and Applications **4 hours**

Intensive exploration of research and design techniques with specific applications in the student's individual area of specialization. (This course is to be coordinated with the Internship and Senior Project.) *Prerequisites:* Senior standing and approval of the Director.

S.A. 487-488 Independent Study **2 or 4 hours each**

S.A. 490 Senior Project **2-8 hours**

Social Sciences

Social Sciences is a grouping of courses only. It is not a separate department. Students who participate in such programs as the American University Washington Semester and other similar off-campus programs may receive credit in this area.

Students majoring in History, Politics and Public Policy, Economics or Sociology who wish to be recommended for state certification in Social Studies must complete the following courses: History 100, 201, 202, 225; Soc. 100 or 220; Eco. 200; G.S. 202 or Soc. Sci. 302; Pol. 225, as well as 24 hours in their major field. See the Education Department listing for required Professional Education courses.

Soc. Sci. 302 World Geography **2 hours**
Study of the physical, social, and political geographic factors of the world. Recent changes in Europe, Asia, and Africa are discussed.

Soc. Sci. 320 Cultural Backgrounds of British Literature **4 hours**
Survey of British history from the Celtic times to the present. Major political developments such as the development of parliamentary government and the constitution are taken into account, but major emphasis is placed on extra-political matters such as the development of the English language, music, art, architecture, drama, the English church, education, and domestic life. Every effort is made to take advantage of the locale to visit museums, castles, cathedrals, universities, Parliament, theatres, and concert halls. Taught in Oxford, England.

Soc. Sci. 480 Methods and Materials in Teaching Social Studies **2 hours**
Nature, objectives, and curricula of social studies in junior and senior high schools. Concepts and methods of approach are emphasized. Methods, techniques, teaching aids, resource units, lesson plans, evaluation, and teaching reading and study skills. (May be taken for credit as Education 480.)

Sociology and Social Work

Aims

To acquaint students with basic theories, research techniques, and applied practices in sociology, social work, and anthropology, and to prepare students for graduate study in these disciplines, or to enter professions in community service and other fields which require a knowledge of social relations.

Requirements for Field of Concentration in Sociology

A minimum of 36 hours in Sociology, including Sociology 100, 200, 209, and 477, plus a Senior Project. Related requirements are Mathematics 281 or Psychology 103; Interdisciplinary Studies 251 or 252, the other being strongly recommended. Sociology 100 or 220 is a prerequisite to Sociology 200, 309, 320, 329, 330, 353, 361, 362, 470, and 477.

- Soc. 100 Introduction to Sociology** **4 hours**
Introduction to basic concepts and perspectives of the study of society. Includes analysis of principal institutions and social processes.
- Soc. 105 Computers and Society** **2 hours**
(See Computer Science 100.)
- Soc. 200 Sociological Theory** **4 hours**
Examination of social thought with primary emphasis upon the principal theorists from the 19th century to the present.
- Soc. 205 Social Problems** **4 hours**
Though emphasis and illustrations will vary as the scene changes, the course is built on the analysis of fundamental and continuing problems and dilemmas, such as crime and delinquency, racial and ethnic relationships, health care and maintenance, employment, housing, poverty, and environmental issues.
- Soc. 209 Research Methods** **4 hours**
The student is guided through the formal process of designing an empirical project. Emphasis is placed upon systematically reviewing relevant literature and justifying decisions concerning techniques to be used. Includes hypothesis formation and testing, methods of data collection and analysis, and problems of sampling. *Prerequisite: Math. 281.*
- Soc. 210 Race and Minority Concerns** **2 hours**
A survey of racial, cultural, ethnic, age and sexual diversity with emphasis on the effects of prejudice and discrimination on minorities.
- Soc. 220 Cultural Anthropology** **4 hours**
Examination of cultural variability, especially in terms of its influence on human behavior. Comparative analysis of cultural systems with an emphasis on contemporary non-Western societies.
- Soc. 300 Social Movements** **2 hours**
Examination of the origins and development of religious, political, agrarian, and labor movements. Both historical and contemporary examples of revolutionary and reform movements will be analyzed.
- Soc. 302 Schools and Society** **4 hours**
A study of the role of schools in a society, of the school as a formal and informal organization, and of the function of schooling. The course will utilize the methodologies of the disciplines of education, sociology, and other social sciences. Case studies and on-site observations combine with a variety of readings to provide a wide range of viewpoints for students to evaluate. (May be taken for credit as Education 302.)
- Soc. 309 Formal Organization** **4 hours**
Analysis of commercial, industrial and public organizations and bureaucracies. Morale, subgroup conflict and cooperation, and the impact of social environment on organizational structure.
- Soc. 329 Population Study** **2 hours**
An introduction to demography. Theories and methods of studies concerning population size and composition. Trends of population change in the world and in the United States.
- Soc. 351 The Family** **4 hours**
Examination of the structure and function of the family as a basic unit of social organization. Changing nature of marriage and the family in American society.
- Soc. 353 Social Stratification** **2 hours**
Study of forms of social stratification and differentiation. Class, prestige and power as the bases of stratification. Theories of the cause of social stratification and social mobility.
- Soc. 356 Sociology of Religion** **4 hours**
Formal religion and its functional equivalents both in primitive and modern societies. The relationship between religion and other social institutions. Religion and social change. (May be taken for credit as Religious Studies 322.)

- Soc. 361 Deviance and Social Control** **4 hours**
Sociological perspectives focusing on problems of deviance such as crime, mental illness, and sexual deviation. Institutions of correction and rehabilitation are examined.
- Soc. 362 Socialization** **2 hours**
Study of socialization as a process whereby the individual becomes a functioning member of a group. Processes of resocialization.
- Soc. 470 Field Work** **2-8 hours**
Available to students who are sufficiently advanced in their theoretical and methodological studies to undertake investigation of a practical or theoretical problem in a field setting. *Prerequisite: Permission of Department.*
- Soc. 477 Senior Seminar** **4 hours**
Consideration of conceptual and research problems in a seminar setting. Includes preparation for comprehensive examinations and senior projects.
- Soc. 487-488 Independent Study** **2 or 4 hours each**
Studies may be planned as extensions of, or separate from, existing Department offerings.
- Soc. 490 Senior Project** **2-8 hours**
For students approaching completion of their majors. Designed to help students evaluate their activities in sociology and to integrate their educational experiences.

Requirements for Field of Concentration in Social Work

The goal of the social work program is to prepare the student for beginning social work practice. Students will accomplish this goal by completing the following courses: S.W. 120, S.W. 201, S.W. 202, S.W. 220, S.W. 230, S.W. 240, S.W. 310, S.W. 350, S.W. 352, S.W. 470, and S.W. 477. In addition, students must complete Bio. 100, Soc. 205, Soc. 209, Soc. 210, Psych. 100, Psych. 326, and completion of a Senior Project in Social Work. Social Work 120 or 240 or permission of the department head is a prerequisite to all courses in Social Work, except Social Work 125-150, 230 and 310.

Students electing the field of study in Social Work are expected to take a course in human anatomy and physiology and to select Perspectives courses to include: Sociology 100, Psychology 315, 324 and 325.

The Social Work program is accredited by the Council on Social Work Education.

- S.W. 120 Introduction to Social Welfare and Social Work** **2 hours**
An examination of the origin and development of social welfare as an institution in the United States. Examination of the role of the social worker, and the place of the profession in society.
- S.W. 125-150 Special Topics in Social Work** **2 or 4 hours each**
Seminars in this category take up special topics of mutual concern to faculty and students.
- S.W. 125 Child Welfare Services** **2 hours**
This course is a comprehensive study of the principal child welfare services. It begins by defining child welfare, placing it as a field of practice within social work, and presents a scheme for the categorization of child welfare problems in terms of role theory. It provides a historical perspective on how and why welfare services developed to describe the current socioeconomic context in which they operate. Topics covered include adoption, child abuse and neglect, day care, foster care and other child caring institutions.
- S.W. 130 Alcohol Use & Abuse** **2 hours**
Designed to provide alcohol education to those interested in better understanding the effects of alcohol on individuals, families, and the community at large. Topics for study include: the use and misuse of alcohol throughout history, effects of alcohol on the human body, personal and societal costs of drinking, etiology of alcoholism, and considerations for special populations.

S.W. 135 Working With the Aged 2 hours

This course is a study of the biological, psychological, social, economic, cultural and spiritual factors of the aged in society. The course will provide an overview for persons in the helping professions who want to work with older people individually or with members of families, groups or organizations. Research efforts will be presented that illuminate our present knowledge about various aspects of aging and about the heterogeneous elderly population in the United States.

S.W. 140 Peer Counseling 2 hours

An introduction to basic listening and communication skills using an applied crisis intervention model and a practice and experiential exercise orientation. The focus of the course is the development of listening skills applicable to a variety of helping situations. Focuses on skills (listening and problem-solving), strategy (crisis intervention model), and self (the student as helper). Topics will include: the nature of crisis, continuing and following responses, feedback, nonverbal communications, specific college student issues and referral skills.

S.W. 201 Human Development I 4 hours

Individual and group development from infancy to adolescence. Observation and first-hand contacts with children are included. Educational programs are considered in terms of the total child development. (May be taken for credit as Education 201.) *Freshmen not admitted.*

S.W. 202 Human Development II 4 hours

Individual and group development from adolescence through senescence. Applications are made in relation to learning theory, self-understanding, and preparation for working with young people. (May be taken for credit as Education 202.) *Freshmen not admitted.*

S.W. 220 Social Welfare Policies and Services 4 hours

Examines the social, political and economic context of social welfare policies and programs. Analysis of specific policy issues and their implications for professional social work practice.

S.W. 230 Social Welfare Institutions 2 hours

Critical examination of organized societal response to social welfare need. Conducts a conceptual analysis of the scope and intent of social welfare programs, clarifying the concept of social welfare and showing how welfare intent is carried into constructive social action.

S.W. 240 Introduction to Social Work Practice 2 hours

An introduction to basic dynamics necessary to engage clients in the social work process. Beginning listening, interviewing, and recording skills will be emphasized.

S.W. 310 Human Behavior and the Social Environment 4 hours

Focuses on the person as an individual with the continuing potential for growth and change. The maturational process of the individual will be followed with emphasis being given to interaction with the social environment, coping abilities and capacity for change. The bio-psycho-socio-cultural determinants of behavior are studied integrating knowledge of the person-in-his/her situation.

S.W. 350 Social Work Practice and Methods I 4 hours

Basic theories and concepts undergirding skills for professional social work practice. Study focuses on professional values, social work roles, and social work client relationships. Skills in interviewing, data collection and case recording are explored and practiced.

S.W. 352 Social Work Practice and Methods II 4 hours

In-depth and advanced examination of the social work process. Problem solving and intervention strategies are studied in relation to prevention, maintenance, and rehabilitation. The skill of social work practice is explored in the context of current programs and practice methods.

S.W. 470 Field Placement 12 hours

An educationally directed internship experience in a social welfare agency or program as a social work practitioner. The field experience will involve five full days a week agency experience during the fall semester of the senior year of study. The placement is designed to test and increase student practice skills with the goal of self direction and the appropriate use of supervision and consultation within the social work practice setting.

S.W. 477 Field Practice Seminar

4 hours

Provides advanced professional knowledge which examines problems and issues of social work practice. The transitional role of the student moving from an undergraduate academic setting to the world of work and/or graduate study will be explored. Need for specific content not previously available to the student is arranged.

S.W. 487-488 Independent Study

2 or 4 hours each

Studies may be planned as extensions of, or separate from, existing Social Work offerings.

S.W. 490 Senior Project

2-8 hours

Study will be directed in a specialized concentration of social work practice. Designed to allow the student to integrate both the field placement and academic experience.



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 B.A., B.M., Friends University; M.A., University of Kansas; Pittsburgh Musical Institute; Juilliard School of Music; Indiana University.

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 B.A., Muskingum College; M.Ed., University of Pittsburgh; University of Wisconsin; New York University; University of Wyoming; University of Southern California; University of Michigan.

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 B.A., Bethany College; M.A., University of Pittsburgh; Ph. D., Columbia University; University of Oxford.

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B.A., University of North Dakota; M.A., Columbia University.

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B.A., B.D., Texas Christian University; LL.D., Texas Christian University; University of Chicago; Columbia University; Litt. D., Culver-Stockton College; L.H.D., Chapman College; Ed.D., Transylvania University; Litt.D., University of Cincinnati; Litt.D., Findlay College; Pd.D., Youngstown University; D.B.A., Lawrence Institute of Technology; H.H.D., Bethany College; J.D., William Woods College; Litt. D., West Virginia University; L.H.D., Concord College; Ed.D., Rio Grande College; LL.D., Alderson-Broaddus College; LL.D., Quincy College; D. Hum., Washington and Jefferson College.

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B.A. Bethany College; Marjorie Webster School of Physical Education.

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B.S., United States Military Academy; M.A., University of Maryland; Catholic University; Laval University.

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Pennsylvania Academy of Fine Arts; Barnes Foundation.

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B.A., Princeton University; Ph.D., University of California.

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B.Th., Northwest Christian College; B.A., Transylvania University; B.D., Christian Theological Seminary; M.A., Butler University; Th.D., Harvard University; D.D., Milligan College; University of Washington; University of Chicago; New York University; Middle East Center for Arab Studies; University of Tübingen, West Germany; American School for Classical Studies, Athens; Howard Center for World Religions.

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Ph.D., Marburg University; Yale University.

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B.M., Louisiana State College; M.M., Cincinnati College Conservatory of Music.

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Professors

WILLIAM L. YOUNG, *Professor of History and Head of the Department*. (1950).

B.A., Bethany College; M.A., Ph.D., Ohio State University; Columbia University.

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B.A., Bethany College; M.A., Princeton University; University of Akron; University of Kansas; University of Birmingham, (England); University of Edinburgh; University of Oxford.

- JAMES W. CARTY, JR., *Professor of Communications*. (1959).
B.A., Culver-Stockton College; B.D., University of Chicago; M.S., Northwestern University; University of Oklahoma; George Peabody College; Scaritt College; Saltillo (Mexico) State Teachers College; Diploma from National University of Nicaragua; Diploma from University of San Carlos; Ohio University; University of Denver; Universidad Iberoamericana; D.D., Evangelical Seminary of Puerto Rico.
- ROBERT E. MYERS, *Professor of Philosophy and Head of the Department*. (1964).
B.A., Bethany College; M.Div., Texas Christian University; Ph.D., Ohio State University.
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B.S., M.S., New York State University, Albany; Ph.D., Rutgers University; Albany Medical College.
- JOHN U. DAVIS, *Professor of Education*. (1966).
B.A., Bethany College; M.A., Ed.D., Columbia University; University of Nebraska; University of Oxford; Harvard University; West Virginia University.
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B.A., Denison University; M.A., Western Reserve University; University of Mexico; Ph.D., West Virginia University; University of Oxford. (*On sabbatical leave, second semester.*)
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B.A., Upsala College, M.A., Ph.D., University of Pittsburgh; University of Paris.
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B.S., Sul Ross State University; Ph.D., Texas A and M University; Iowa State University; Ohio State University; Carnegie Mellon University.
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B.A., M.A., Ph.D., Michigan State University.
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B.S., Oklahoma Christian College; B.B.S., Abilene Christian University; Ph.D., University of Texas.

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B.S., M.A., Indiana University (Indiana, Pennsylvania); M.A., University of Pittsburgh; M.Sc., Ohio University.

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B.S., M.B.A., University of Steubenville.

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B.S., Slippery Rock State College; M.S., Slippery Rock University.

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Religious Studies	Frank H. Gorman, Jr.
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Drama	David J. Judy
Engineering	Majid A. Sawtarie
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For Practicum Program

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COMPUTER ADVISORY

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FACULTY PERSONNEL

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FACULTY WELFARE

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GANS AWARD

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GRADUATE SCHOOL ADVISORY

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Robyn R. Cole (Chair), Albert R. Buckelew, Jr., W. Randolph Cooley, Anthony L. Mitch, Darline B. Nicholson, James A. Zalacca, January Term Director, Chief Business Officer.

JAPANESE CULTURE

Fujiko O. Sawtarie (Chair), John T. Burns, W. Randolph Cooley, Gary H. Kappel, Mary Ellen Komorowski, Pauline R. Nelson, Albert J. Ossman, Jr.

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Dean of Faculty (Chair), Ann C. Shelly (Acting Chair), Albert R. Buckelew, Jr., Katherine S. Coram, Robert J. Funk, Jr., John H. Hull, Anthony L. Mitch, Christine P. Ossman, Registrar.

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Practicum Director (Chair), John T. Burns, C. Kent Clinger, Robyn R. Cole, W. Randolph Cooley, Russell J. Cook, Katherine S. Coram, Joseph M. Lesem, D. Richard Teubner.

PRE-LAW ADVISORY

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RELIGIOUS LIFE

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SOCIAL WORK ADVISORY

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Larry E. Grimes (Chair), Lynn F. Adkins, Katherine S. Coram, John S. Cunningham, Janice L. Forsty, Thomas E. Kelly, Wallace B. Neel, Robert A. Paysen, Christine Sampson, Majid A. Sawtarie, John R. Taylor, Dean of Faculty.

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Notice of Nondiscrimination Policy

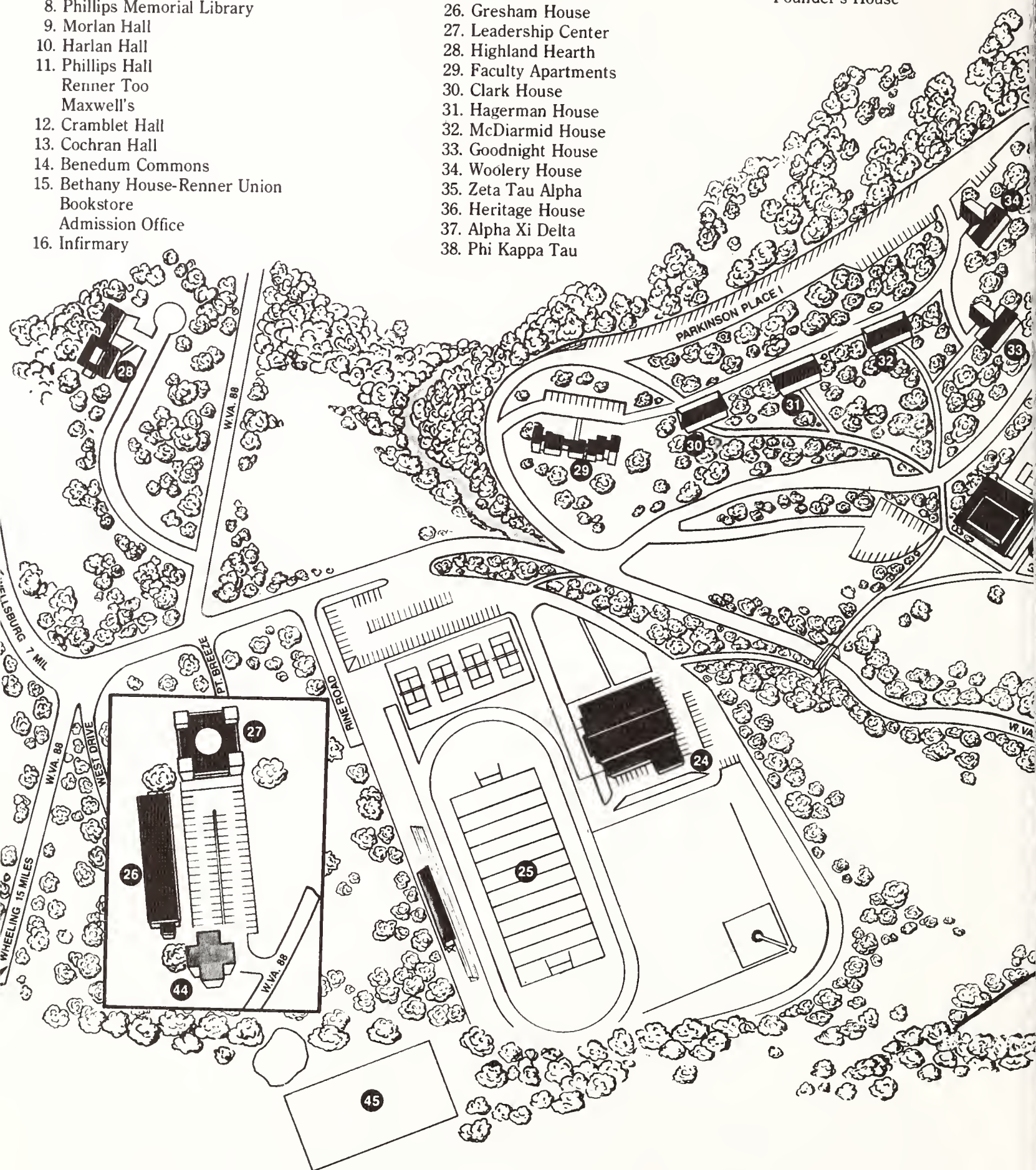
Bethany College admits students of any race, color, sex, religion, handicaps, and national or ethnic origin to all of the rights, privileges, programs and activities generally accorded or made available to students at the school. Bethany does not discriminate on the basis of race, color, sex, religion, and national or ethnic origin in the administration of its educational policies, scholarship and loan programs, athletic activities or other school-administered programs.

Bethany

1. Pendleton Heights
2. Old Main
3. Commencement Hall
4. Oglebay Hall
5. Steinman Fine Arts Center
Wailes Theater
6. Grace Phillips Johnson Visual Arts Center
7. Richardson Hall of Science
Weimer Lecture Hall
8. Phillips Memorial Library
9. Morlan Hall
10. Harlan Hall
11. Phillips Hall
Renner Too
Maxwell's
12. Cramblett Hall
13. Cochran Hall
14. Benedum Commons
15. Bethany House-Renner Union
Bookstore
Admission Office
16. Infirmary

17. McEachern Hall
18. McLean Hall
19. Bethany Memorial Church
20. Campbell Hall
21. Physical Plant
22. Heating Plant
23. Knight Natatorium
24. Alumni Field House
25. Rine Field
26. Gresham House
27. Leadership Center
28. Highland Hearth
29. Faculty Apartments
30. Clark House
31. Hagerman House
32. McDiarmid House
33. Goodnight House
34. Woolery House
35. Zeta Tau Alpha
36. Heritage House
37. Alpha Xi Delta
38. Phi Kappa Tau

39. Kappa Delta
40. Phi Mu
41. Weimer Nature Trail
42. Amphitheater
43. Oglebay Gates
44. Harder Hall
45. Athletic Field
46. Delta Tau Delta
Founder's House







Bethany College
Bethany, West Virginia 26032
304-829-7000





Bethany

College Bulletin 1989-1990



August 1989



Bethany College Bulletin

1989 - 1990

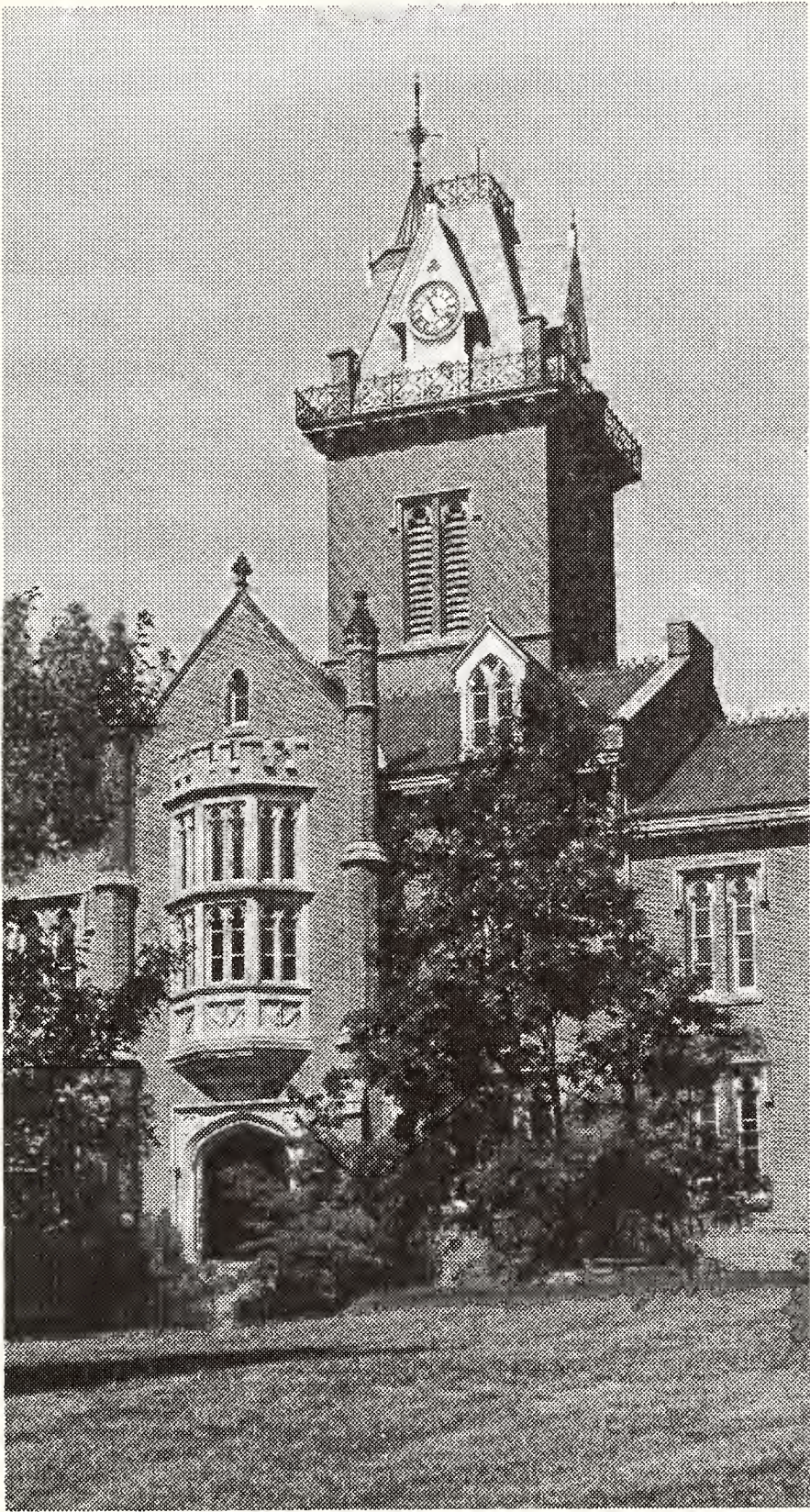


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College Calendar 1989 - 1990

The Bethany calendar consists of two 15-week semesters and a four-week voluntary interim session in January. The fall semester is from early September to before Christmas. The spring semester is from February through May. Some courses are offered over the full semester while others are for the first or second half of a semester. This division provides flexibility for students to do off-campus study and internships.

The four weeks in January are an opportunity for students to elect for use in intensive study on campus or for off-campus work. Two five-week summer terms and an 11-week summer independent study period are offered.

First Semester

2-5 Saturday-Tuesday

5 Tuesday

6 Wednesday

12 Tuesday

14 Thursday

19 Tuesday

September

Orientation and evaluation for new students

Registration for returning students

First day of classes for all students

Last day for adjustment of schedules

without academic and financial penalty;

last day to add a course

Formal Convocation

Last day to determine credit/no credit

13-15 Friday-Sunday

24 Tuesday

27 Friday

27-29 Friday-Sunday

30 Monday

October

Homecoming Weekend

Last day of classes for first-half semester
courses

NO CLASSES; Mid-term grades due

Parents' Weekend

Writing Qualification Test

for Freshman Seminars

November

Thanksgiving Convocation

Board of Trustees Meeting

Pre-registration for second semester

Thanksgiving vacation begins

Thanksgiving vacation ends

9 Thursday

11 Saturday

13-17 Monday-Friday

21 Tuesday, 4 p.m.

27 Monday, 8 a.m.

December

Last day of classes

Reading Days

Final examination period

Final grades due

15 Friday

16-17 Saturday-Sunday

18-20 Monday-Wednesday

22 Friday

January Term

January	
3 Wednesday	First day of classes
13 Saturday	January Term classes meet
15 Monday	Last day of classes for first-two-week courses
16 Tuesday	First day of classes for last-two-week courses
22-23 Monday-Tuesday	Senior Comprehensive Examination (Written)
24-27 Wednesday-Saturday	Senior Comprehensive Examination (Oral)
27 Saturday	Last day of classes; January Term classes meet

Second Semester

January	
28 Sunday	Registration for all students;
29 Monday	First day of classes for all students
February	
2 Friday	Last day for adjustment of schedules without academic and financial penalty; last day to add a course
9 Friday	Last day to determine credit/no-credit
March	
2 Friday	Founder's Day and Convocation
8 Thursday	Writing Qualification Test (sophomores and juniors)
16 Friday	Last day of classes for first-half semester courses
16 Friday, 4 p.m.	Spring vacation begins
20 Tuesday	Mid-term grades due
26 Monday, 8 a.m.	Spring vacation ends
April	
13 Friday	No classes; Good Friday
19 Thursday	Honors Day and Convocation
23-27 Monday-Friday	Pre-registration for first semester, 1990-91
28 Saturday, 8 a.m.	Reading period for Comprehensives begins
30 Monday	Grades due for students taking Comprehensives
May	
7-8 Monday-Tuesday	Senior Comprehensive Examination (Written)
9-12 Wednesday-Saturday	Senior Comprehensive Examination (Oral)
11 Friday	Grades due for graduating seniors who previously took Comprehensives; last day of classes
11-13 Friday-Sunday	Alumni Weekend
12-13 Saturday-Sunday	Reading Days
14-16 Monday-Wednesday	Final examination period
17 Thursday	Final Faculty Meeting
18 Friday	Board of Trustees Meeting
18 Friday, 8 p.m.	Baccalaureate
19 Saturday, 10 a.m.	Commencement
21 Monday	Final grades due

Bethany Profile

Bethany College, 150 years old, is a highly contemporary institution based in the tradition of the liberal arts.

The College offers a wide array of studies and awards bachelor of science or bachelor of arts degrees in the fields of Accounting, Biology, Chemistry, Communications, Computer Science, Economics and Business, Education, English, Fine and Applied Arts, French, German, Health Science, History, Interdisciplinary Studies, Mathematics, Philosophy, Physical Education, Physics, Politics and Public Policy, Psychology, Religious Studies, Science Applications, Spanish, Sociology and Social Work.

In addition, pre-professional education is available in dentistry, engineering, law, medicine, public administration, theology, and veterinary medicine.

The College's program of liberal education prepares students for a lifetime of work and a life of significance. Bethany places particular emphasis upon leadership and broad areas of communications, management, public policy and administration, and science and technology.

Bethany has excellent facilities to support the traditional offerings and its emphases, and integrates today's technology in its general education program. As one example, computing, a central feature in many academic disciplines, is offered as a field of concentration (major), and is an emphasis for the coming decade. The College's Center for Academic Computing has been enhanced with the recent addition of a visual arts center featuring up-to-date computer graphics equipment.

Bethany was founded March 2, 1840, by Alexander Campbell, educator, celebrated debater and Christian reformer who provided land and funds for the first building and served as first president.

Since its inception, Bethany has remained a four-year private liberal arts college affiliated with the Christian Church (Disciples of Christ). This religious body, of which Campbell was one of the principal founders, continues to support and encourage Bethany, though it exercises no sectarian control. Students of virtually every religious communion have been welcomed to the College.

Bethany is located in the northern panhandle of West Virginia in the foothills of the Allegheny Mountains. Pittsburgh is 48 miles to the northeast. Wheeling, W. Va., and Washington, Pa., are each a half-hour drive from the 1,600-acre campus.

Bethany students, approximately 850, represent nearly 30 states and 15 foreign countries. Typically, one third is from the East coast and the New England states. Another third represents the Mid-Atlantic Region, while the remaining one-third is from other states and countries.

Goals

In its charter, granted in 1840 by the Commonwealth of Virginia and recognized in 1863 by the newly organized state of West Virginia, the mission of Bethany College is defined as

the instruction of youth in the various branches of science and literature, the useful arts, and the learned and foreign languages.

Alexander Campbell, Bethany's founder and first President, viewed the College's mission as stated in the charter in the context of the Judaeo-Christian tradition and the thinking of the American Enlightenment, interpreting it to imply the educating of students to become useful and responsible members of society by liberating them from superstition and ignorance, the tyranny of others, and "vulgar prejudices."

Bethany College continues to accept the implications of its mission as understood by its founder. It continues to accept the responsibility for nurturing effective, honorable, humane, and intelligent citizens who believe in and will promote the creation of a world of worth and value, integrating critical reason and the spiritual dimensions of life, personal accomplishment and ethical responsibility, and individual development and service to others. It continues to accept the responsibility for promoting the development of responsible members of society who:

- are marked by a rigorous, developed intellect and substantial knowledge
- are sensitive and responsive to persons, events, issues, and people in the world around them
- become involved with and sensitive to persons, events, issues, and problems
- assume responsibility for and accept the consequences of their involvement
- humanize and make effective the institutions they affect
- are motivated to nurture and serve the persons around them
- assist in the clarification and resolution of issues and problems of the world
- know themselves and develop an examined system of ethics and values
- possess the basic skills and insights needed to undertake these tasks

The Bethany educational program is designed to implement the College's mission. It encourages students to realize their intellectual capabilities, moral capacities, and leadership potential by assisting them as they strive to fulfill each of the following specific goals:

- to discover how to acquire, evaluate, and use knowledge
- to master skills of communication
- to cooperate and collaborate with others in study, analysis, and formulation of solutions to problems

- to understand contemporary issues and events
- to analyze personal values, to perceive and to deal sympathetically with the values of others, and to be open to the continued evaluation of both
- to make progress toward the selection of and the preparation for a vocation
- to integrate the various experiences of life and to see the relationship of the college experience to future development as a responsible citizen

Accreditation, Memberships

Bethany College is accredited by or holds memberships in:

- North Central Association of Colleges and Secondary Schools
- Association of American Colleges
- American Council on Education
- American Association for Higher Education
- College Entrance Examination Board
- Council on Social Work Education
- American Association of Colleges for Teacher Education
- National Council for the Accreditation of Teacher Education
- Council of Independent Colleges
- Division of Higher Education of the Christian Church (Disciples of Christ)
- Women graduates are eligible for membership in the American Association of University Women

Admission

Application

Bethany welcomes applications for admission from candidates who feel they would contribute to and benefit from a Bethany education. Admission is based on a careful review of all credentials presented by the candidate. The Committee on Admission accepts candidates it considers best qualified among those applying. In no case does the meeting of minimum standards assure admission. Acceptance is contingent upon a candidate's successful completion of secondary school.

The College seeks students who have prepared themselves for a liberal arts curriculum by taking at least 15 units of college-preparatory work. Although the College does not absolutely prescribe how these units should be distributed, it encourages a minimum of four years of English, three years of mathematics, three years of science, three years of social science and at least two years of a foreign language. For students who have developed individual curricula or are involved in experimental honors programs, the Committee on Admission makes special evaluations.

Freshmen

The application process includes: 1) furnishing a transcript of completed work; 2) the application for admission; 3) two reference letters; 4) either the College Entrance Examination Board Scholastic Aptitude Test (SAT) scores or the American College Testing Program (ACT) scores.

Supporting documents that might be of help in the process of admission, that is poetry, plays, short stories, music, artwork, photography, and journalistic writings, may also be submitted.

Bethany's policy of rolling admission enables the Committee on Admission to act on completed applications as they are received. Applicants will be notified of the Committee's decision approximately three weeks after all credentials have been received. Early application is advised.

Application for admission to Bethany College and a decision for acceptance of the applicant will be effective for the academic year for which the application was initiated and/or for which the applicant was accepted. Thereafter, a new application must be submitted for evaluation and decision by the Committee.

Transfers

The College welcomes well-qualified transfer students. Applicants for transfer must have had a good academic record in the institution attended and must present full credentials for both college and preparatory work, including a statement of honorable dismissal that is to be completed by the dean of students of the prior institution. They must take the Scholastic Aptitude Test given by the College Entrance Examination Board or the American College Test (ACT) if this test has not been taken previously. A copy of the catalog from the school previously attended must also be submitted.

One year of study at Bethany College constitutes the minimum requirement for a degree. Applications for transfer must be filed by August 1 of the year in which entrance is desired. Decisions on these applications are announced by August 15. Application for transfer at mid-year must be received by January 15. Financial assistance is available for transfer students.

Community/Junior College Graduates

Students who have received or will receive an Associate in Arts or Associate in Science Degree and find Bethany's curriculum suited to their educational goals are encouraged to apply.

Holders of the A.A./A.S. Degree who are accepted receive at least two years (minimum 60 hours) credit, enter as juniors, and receive all the rights and privileges of upperclass students.

The College will make every effort to assist holders of Associate degrees to complete their baccalaureate programs within two years at Bethany. However, some fields of concentration may require more than 68 additional hours beyond the 60 referred to above, depending on the type of Associate's program the student has completed.

Special Advising

The Special Advising Program provides a comprehensive set of services specifically designed to support the learning disabled student in the college mainstream. The program focuses upon developing skills which will maximize the student's independence for lifelong learning. Additional fees are assessed.

In order to participate in a part of the Special Advising Program, a student must first be admitted to Bethany College. In addition to the application, high school transcript, and recommendations, a student must submit SAT or ACT scores (non-standard tests acceptable), and full documentation of the learning disability. The student is also required to participate in an on-campus interview.

Early Admission

Some students complete their secondary school graduation requirements a year early and decide to pursue college admission after their junior year. For those who have demonstrated maturity and show evidence of a strong academic background, Bethany offers a program for early admission. For this type of admission, the usual admission procedures must be followed. In addition, the student must have an interview on campus and the student's high school counselor must confer with a Bethany admission officer.

Advanced Placement

Students may receive advanced placement and/or credit from any department in the College through a testing program. This must be accomplished before the end of the first year at Bethany College. Those who wish to receive credit by examination should consult with the Office of Career and Professional Development and the appropriate department head.

Credit may be received for courses waived as a result of high scores on the College Entrance Examination Board Testing Program for Advanced Placement. The waiving of courses or granting of credit, however, are departmental matters and require consultation with the appropriate department head upon matriculation.

Visiting Bethany

Although not required, an on-campus interview with an admission officer is highly recommended. A campus visit will enable the student to develop some understanding of the College and its expectations. A comprehensive tour, observation of classes, and interaction with Bethany students and faculty are available upon request.

Prospective students are also invited to remain overnight as the guest of a Bethany student. Meals and overnight accommodations in College housing for prospective students are provided by the College. Lodging for parents is available on campus at Gresham House, as well as nearby lodges and motels. Transportation arrangements from the Greater Pittsburgh International Airport, as well as from the Pittsburgh rail and bus terminals, may be arranged through the Admission Office.

The Admission Office is open Monday through Friday from 8:30 a.m. to 4:30 p.m. and Saturday from 9 a.m. to 1 p.m. throughout the year. Appointments may be made by calling 304-829-7611 or 800-922-7611, or by writing the Admission Office, Bethany College, Bethany, West Virginia 26032. Three days advance notice is requested to

make proper arrangements.

Information on admission and registration fees, as well as details on expenses, aid, and scholarships are on pages 9-13 and 28-35.

Foreign Students

Bethany is pleased to receive applications by students from other countries. Approximately 15 countries are represented on campus each year.

Students from non-English-speaking countries are required to submit, along with an application for admission, a complete secondary school transcript, the results of the American College Testing Program (ACT), the College Entrance Examination Board Scholastic Aptitude Test (SAT), or the Test of English as a Foreign Language (TOEFL), and at least two letters of recommendation. Applicants for the Fall Semester must submit the above stated materials by July 1.

Foreign students are also requested to complete a Foreign Student's Financial Aid Application and Declaration. This form is to be returned with admission materials by the deadlines mentioned. Although Bethany is willing to review requests for financial assistance, funds are limited.

Application for Admission

A non-refundable \$20 fee is required at the time of formal application.

Application for Readmission

Students previously enrolled in Bethany College who wish to return for additional work must file an Application for Readmission with the Registrar's Office. A \$5 fee is required at the time such application is made.

Registration Deposit

A student accepted for admission or readmission is required to pay a \$100 registration deposit. This deposit is not refunded until after graduation or until one of the following procedures is completed: 1) a student accepted for admission who has paid the registration deposit but decides not to attend Bethany may request in writing a refund before May 1 prior to the intended matriculation; 2) a matriculated student who withdraws from Bethany may have the deposit refunded after the last term at the College if written notice is given to the Business Office prior to the advance enrollment date for the next regular term.

Matriculation Fee

A \$20 fee is required of every new student to cover part of the cost of orientation and evaluation procedures for new students.

Expenses, Aid

Bethany College is a non-profit institution. Tuition, fees and other general charges paid by the student cover approximately two-thirds of the College's instructional and operational expenses. The remainder comes from income from endowment funds and from gifts and contributions. Bethany continues to keep costs as low as possible.

Charges and fees stated on the following pages apply only to 1989-1990.

Comprehensive Charges

Comprehensive charges for the 1989-1990 year at Bethany include the following:

Tuition and Fees	\$9,768
Room (Double Occupancy)	\$1,312
Board	\$2,090
Student Board of Governors	\$204

The charge for tuition and fees includes tuition and the following activities and services: athletics, health service, library, lectures, plays, concerts, publications, student union, student activities, and laboratory services with the exception of music and art.

No reduction is made in student accounts for course changes made after the first two weeks of the semester. Bethany reserves the right to change, without advance notice, the price for room, board, and health insurance.

Financial Aid

Bethany believes that the funding of a student's education is primarily a family responsibility. However, financial assistance is available to those students whose resources will not fund a Bethany education and yet sincerely desire to attend. Outstanding students, regardless of demonstrated need, frequently receive scholarships and grants to attend the College. Several programs are available to such students. Inquiries are encouraged.

All need-based aid is awarded through careful evaluation of the Financial Aid Form (FAF), available from the student's guidance counselor. Designation of Bethany College as an institution to receive the processed information is required. All applicants for admission to Bethany are sent detailed information and instructions regarding the financial aid application and awarding processes, normally beginning in December.

Because of the large number of applications for financial aid, assignment of funds is made according to the date the Financial Aid Form (FAF) is received by College Scholarship Service. April 1 is the priority deadline for all new students. March 1 is the deadline for all returning students. The earlier a student completes all admission materials and all financial aid materials, the sooner financial aid awards can be determined.

A financial aid applicant whose need for assistance has been confirmed through a review of the Financial Aid Form will have his or her need met through a variety of financial aid resources, including scholarships, grants, loans, and College employment. The student has the option of accepting any or all of the aid offered. A student receiving an offer of financial assistance may discuss any problems arising from the offer with an officer of the College. The Admission Office or the Financial Aid Office helps to arrange these interviews.

Fees for Programs of Study Abroad

Heidelberg: \$4,885 for one semester, includes tuition and fees, stipend to sponsor in Germany, and round-trip air fare.

Oxford: not offered in 1989-1990.

Paris Sorbonne: \$4,885 for one semester, includes tuition and fees, stipend to sponsor in France, and round-trip air fare.

Spain: \$4,885 for one semester, includes tuition and fees, stipend to sponsor in Spain, and round-trip air fare.

Other Special Fees

Chemistry 490	\$20
Education 470: off-campus student teaching (<i>per semester</i>)	\$5,156
<i>(includes tuition, fees and pre-school week board privileges in the Bethany dining hall)</i>	
English 160	\$15
Physical Education 340	\$30
Physical Education 341	\$30
Each academic hour when fewer than 12	\$368
Each academic hour in excess of 16	\$318
Auditing a course, per semester hour	\$318
<i>(a student is not charged if paying regular tuition and fees and the total program, including the audit, does not exceed 18 hours)</i>	
Comprehensive Examination	\$25
Graduation Fee	\$50
Matriculation Fee	\$20
Academic Support Services (<i>per semester</i>)	\$275
Special Advising Fee (<i>per semester</i>)	\$375 to \$1,000
Special Examinations in any department	\$15
Each credit-hour awarded by examination	\$15
Special Room Rates:	
Single	\$740
Double as Single	\$865
Key deposit for dormitories	\$20
<i>(refunded if key is returned)</i>	
Infirmary charge per day	\$5
<i>(after the first three days each semester)</i>	
Late registration	\$3
<i>(per day)</i>	
Automobile Registration	\$20
Sickness Insurance	\$90

Fine and Applied Arts Fees

FAA 153.	\$10
FAA 155.	\$15
FAA 201.	\$5
FAA 203.	\$20
FAA 210.	\$25
FAA 213.	\$15
FAA 214.	\$15
FAA 215.	\$15
FAA 310.	\$15
FAA 313.	\$15
FAA 315.	\$15
FAA 316.	\$15

Fine and Applied Arts fees will also be required for independent study and studio courses where departmental materials are being used.

Private music lessons, one half-hour weekly (per semester)	\$95
Organ practice, one hour daily	\$35 per semester
Instrument rental	\$10 per semester
Piano practice, one hour daily	\$10 per semester

Breakage Deposit

Chemistry and physics breakage deposits are covered by a \$10 breakage card which the student purchases each semester for every laboratory course in which the student is enrolled. In the event breakage exceeds \$10, an additional \$10 breakage card must be purchased. Unused portions are refunded at the end of each academic year.

Payment of Student Accounts

At registration, an invoice listing all charges due for the following semester is prepared for each student. Payments are due in accordance with the following schedule:

- First Semester:** By August 15 payment due
- Second Semester:** By January 15 payment due

Scholarships and loans may be applied as credit against August or January payment requirements.

Students will not be permitted to register if the payment requirements for each semester are not met. These requirements are in addition to the registration deposit. Checks or drafts should be made payable to Bethany College.

Bethany College bills for tuition, fees, room and board twice yearly; other charges are billed as incurred. Twice yearly billings are payable in advance by August 15 and January 15 for the fall and spring semesters respectively.

For accounts past due a monthly service charge of 1.5% on the first \$1,500 (18% per year) and 1% on any remaining balance (12% per year) will be charged as of the 25th of each month.

Students may not take final examinations, receive academic credit, obtain transcripts or graduate until satisfactory arrangements are made to cover financial obligations.

Monthly Payment Plans

Bethany has made arrangements with the Insured Tuition Payment Plan, EFI-Fund Management and Academic Management Services whereby student accounts may be paid on a monthly basis during the year. Arrangements to use this plan should be made prior to the registration period. Information may be obtained by writing to the Bethany College Business Office.

Student Drawing Account

The Business Office provides a limited banking service whereby students may deposit funds and draw on them as required. Students or their parents may make deposits to this recommended student drawing account which avoids the necessity of keeping on hand any substantial amount of money. All checks for this account must be made payable to the Bethany College Student Drawing Account.

Withdrawals and Refunds

After registration, there is no refund of room charges or fees. A student voluntarily withdrawing or withdrawing because of illness during the course of the semester will be charged 10 per cent of tuition charges for each week of attendance or part thereof. There is no refund of tuition after the tenth week of attendance. There is no refund in the event that a student is dismissed or asked to withdraw during the course of the semester. Board refund is prorated, based upon food costs only. Special fees are not refundable.

A student wishing to withdraw from Bethany must file written notice with the Dean of Students to qualify for refund of deposit and adjustment of other charges.

Academic Programs

Based in the liberal arts tradition, Bethany's academic program meets the educational needs of individual students by providing breadth, depth, and the integration of knowledge. Bethany has designed its program of study to assist students to develop intellectual concepts, sophisticated learning skills, moral values, and good citizenship. Preparation for leadership is a central theme of the College.

The Bethany curriculum is unique in caring for the individual students and in helping them develop their full potential at each level of learning. From Freshman Seminars to Senior Comprehensive Examinations, Bethany prepares its students for ever greater tasks and achievements, guiding them toward the fulfillment of personal goals, the challenges of graduate study, and productive and rewarding careers.

Bethany brings its students a rich variety of learning opportunities. Seminars, lectures, laboratory and independent research projects, encounters with high tech-

nology through the use of state-of-the-art television and graphics equipment, artistic performances, and athletic activities present opportunities for self-expression and growth in the arts, in communication, and in athletics. Learning at Bethany often takes place outside traditional classroom settings, through informal interaction with faculty, off-campus internships, and study abroad.

A Bethany education is, then, more than a list of courses. Bethany students approach their study through a framework of common educational goals which define the liberally educated person. Faculty members work closely with all students to ensure a proper grounding in the humanities, sciences, and social sciences. Bethany students have many opportunities for choice; but here, too, faculty work closely with them to ensure that each student's personal plan of study is both comprehensive and coherent. It is this combination of thoroughness and personal expression that makes Bethany unique.

Requirements for a Bethany Degree

The Bachelor of Arts and Bachelor of Science degrees are conferred by Bethany College.

The Bachelor of Arts degree is conferred upon students who satisfactorily complete the following requirements:

- 128 semester hours (including no more than 48 credit hours in any one academic department and no more than the maximum credit hours permitted in activity courses as described on Page 36) with a minimum cumulative grade point average of 2.00000
- a freshman seminar
- the freshman interdisciplinary lecture course
- Religious Studies 100
- the Perspectives Program
- the practicum requirement
- demonstrated proficiency in expository writing
- a field of concentration
- a senior project
- the senior comprehensive examination in the field of concentration
- the residence requirement
- attendance at the commencement exercise

The degree of Bachelor of Science may be conferred upon a student who completes the Bachelor of Arts requirements and who chooses a field of concentration in biology, chemistry, computer science, certain interdisciplinary studies, mathematics, physics, psychology, or science applications.

Freshman Program

Freshman Seminar: All freshmen are enrolled in a freshman seminar during the fall semester. The faculty member who directs the seminar also serves as the student's academic advisor. (Students transferring to Bethany from other colleges are not required to enroll in a freshman seminar.)

Freshman Interdisciplinary Course: All freshmen are enrolled in *Origins of Western Thought: The Modern World* during the spring semester. (Students transferring to Bethany from other colleges as sophomores are also required to enroll in this course.)

Academic Advisor

The student-advisor relationship is a vital aspect of the Bethany education. Although all students are responsible for knowing all requirements for graduation from Bethany College and understanding their progress toward fulfilling those requirements, students and advisors work closely together to develop appropriate classroom and experience-based programs of study.

Freshmen interact with their advisors twice each week during the first semester's freshman seminar and privately at other times. Before the end of the sophomore year, students are required to select a major field of concentration. At that time they are assigned to an advisor associated with their areas of interest.

In addition to advisors designated for freshmen and for major fields of concentration, advisors are designated for professional cores, for career interests, and for specific services such as campus employment, counseling, graduate programs, testing, scholarships, foreign students, writing, and vocational guidance. Lists of advisors appear on Page 117.

Perspectives Program

In addition to the accumulation of knowledge in a wide variety of disciplines, all Bethany graduates are expected to develop perspectives on their world, each of which is, in appropriate ways, systematic, ethical, and integrative. These perspectives are historical, global, religious, aesthetic, scientific, quantitative, social, and personal.

All courses within the Perspectives Program address three overarching concerns of liberal learning: 1) systematic issues of critical thinking about the basic assumptions, methodologies, and frames of reference of the subject field; 2) ethical issues within the disciplines studied; 3) integrative issues designed to assist the student in gaining a personal perspective or point of view about the world as seen through the examined perspective.

To this end, every student must complete at least four hours chosen among the courses in each of the perspectives categories listed below, plus at least four additional hours, for a total of forty hours in the program. Students may receive approval to substitute credit by examination for the four additional hours.

The list of approved courses changes each year. Only courses taken in the year they appear on the approved list will count toward fulfillment of the requirement.

Historical Foundations: *to achieve a knowledgeable view of basic aspects of the origins and the modern background of Western civilization*

Communications 401; English 370; Fine and Applied Arts 103; French 313, 351, 352; German 351, 352; History 201, 202, 301, 302; Interdisciplinary Studies 251, 252; Philosophy 323, 324, 325; Physical Education 244; Spanish 357, 358.

Global Awareness: *to gain an appreciation and understanding of the diversity of the world's cultures, both Western and non-Western*

Communications 403; English 268; French 110, 120, 230, 241; General Sciences 202; German 110, 120, 230; History 101, 102, 426; Interdisciplinary Studies 201, 202, 203, 204, 241; Religious Studies 240, 241, 243, 352; Spanish 110, 120, 230.

Judeo-Christian Tradition: *to understand the religious tradition of the West, particularly the Judeo-Christian tradition as rooted in the Bible*

Religious Studies 100, 304.

Aesthetic Judgment: *to develop an ability to discriminate among various aesthetic forms and values and to gain a basic appreciation of the arts*

English 140, 150, 160, 222 (see January Term offerings), 263, 264, 270, 325, 326, 330, 341, 342; Fine and Applied Arts 101, 102, 120, 200, 201, 211, 212, 270; Philosophy 358.

Life Science: *to understand the world of living things through scientific investigation, including both laboratory or field experiences and inquiry into the humanistic implications of the sciences*

Biology 100, 110, 326; Psychology 100.

Quantitative Reasoning: *to understand analytical and quantitative ways of examining the world*

Computer Science 143, 144, 201, 202; Mathematics 103, 141, 201, 202, 250, 281; Philosophy 123; Psychology 103.

Social Institutions: *to grasp the basic organizing principles, structures, policies, and governing ideas of the institutions of western society*

Communications 101, 304, 402; Economics 200, 300; General Science 101; Philosophy 352; Physical Education 243; Politics and Public Policy 225, 231, 300; Psychology 243; Religious Studies 322; Social Work 120, 230; Sociology 100, 205, 210, 351, 356.

Human Personality and Behavior: *to establish insight into the ways human beings understand themselves and their behavior and development*

Education 201, 202; Philosophy 100, 124, 252, 355; Psychology 186, 324, 325, 326; Social Work 310; Sociology 220.

Physical Science: *to learn how to explore the physical world, from atoms to stars, by applying the scientific method in the laboratory, by understanding mathematical models used in the physical sciences, and by considering the place of science in human affairs*

Chemistry 100, 101, 102, 130; General Sciences 100, 201; Interdisciplinary Studies 210; Physics 100, 201, 202.

To satisfy perspective requirements, students must take these courses on a graded basis. All students must pass Religious Studies 100. Generally, students take this course during the freshman or sophomore year. It can fulfill perspectives program requirements. Students should not enroll in courses to satisfy the Quantitative Reasoning requirement until they have consulted with their advisors about the results of the freshman diagnostic test in quantitative skills.

Practicum Program

Practicums are practical experiences encompassing values Bethany believes to be essential to a complete education. These experiences make a student's academic studies more relevant to the everyday world.

Each student must successfully complete four practicums. They require:

- an experience in responsible citizenship
- a demonstration of an awareness of and involvement in health, physical education, and recreation
- an experience in intercultural living
- an experience in a vocationally oriented activity

Students, with the assistance of the advisor and the Director of Practicums, develop proposals which must have approval of a faculty member and meet the guidelines established for each practicum. Each student completes an evaluation of the experience after each practicum.

Seniors must complete all proposals by December 15 and all evaluations by April 15 of the graduation year.

Further information is available from the Director of Practicums or the Registrar.

Writing Proficiency Requirement

All students must demonstrate an above-average level of proficiency in expository writing. They may do this by either taking the annual Writing Qualification Test or by satisfactory completion of selected writing courses offered by the English Department. Special arrangements are made for students who transfer from other colleges and transfer students should consult the Department of English immediately upon enrolling at Bethany.

Details on the Writing Qualification Test, including when it is given, as well as information on writing courses from which the student may select, are included under the Writing Proficiency Program section in the English Department, Page 65.

Field of Concentration

Every student must select a major field of concentration from one of the academic departments of the College, from among the faculty-sponsored interdisciplinary programs, or by initiating and developing an individual interdisciplinary program.

Departmental fields of concentration are described in detail in the sections of this **Bulletin** devoted to the offerings of the individual academic departments. Each field of concentration requires a minimum of 24 credit hours in courses within the department (exclusive of the senior project) and a maximum of 48 credit hours. Given fields may require up to 24 credit hours in courses from related disciplines.

Faculty-sponsored and student-initiated interdisciplinary fields of concentration cross departmental lines. Information about faculty-sponsored fields is available from the office of the Registrar. Information about student-initiated interdisciplinary study is available in the Interdisciplinary Studies section of this **Bulletin** and from the Director of Interdisciplinary Studies. All interdisciplinary programs require the approval of the Faculty Committee on Interdisciplinary Study. All interdisciplinary programs must include between 24 and 72 credit hours (exclusive of the senior project).

Senior Project

Each student must produce a project which meets the standards of his or her field of concentration.

The project is received and evaluated during the final semester of the senior year. Two to eight hours of credit are given after the final evaluation and approval of the project. Scheduling of the project is at the discretion of the department or the student's advisory committee.

The project is evaluated by at least one person in the field of concentration other than the student's advisor(s). The final evaluation is made in consultation with the student

and the project is made available to the College community.

Recent projects have included extensive research papers, original computer graphics work, writing and producing a radio series, laboratory research, directing a play, and creative writing.

Senior Comprehensive Examination

Capping the Bethany education is the Senior Comprehensive Examination. Comprehensive examinations assure the College of qualitative accomplishment and lead the student to a sense of self-confidence and achievement.

A student who has attained senior standing, is completing the requirements for a field of concentration, and has a GPA of at least 2.00000 in the field of concentration is eligible to take the Senior Comprehensive Examination. To take the Examination the student must apply in the office of the Registrar at least two months prior to the first day of the written section of the Examination. The Examination, which is offered in January and in May, is both written and oral. In some fields of concentration sections of the Graduate Record Examination are part of or prerequisite to the Senior Comprehensive Examination. The Registrar arranges the oral section as soon as possible after the written section, but in no case more than two weeks later.

Students who have completed all requirements in their fields may take the examination in January with the consent of their advisor(s). Students failing the examination in January may take it again in May or at any time that it is regularly given within the following twelve months. If the student fails a second time, the student may petition the faculty for a re-examination during the following year. No student may take the examination more than three times.

Students who do unusually well on the Senior Comprehensive Examination are listed at graduation as having "passed with distinction."

Residence Requirement

Four years are usually required to satisfy the course and residence requirements for the baccalaureate degree. Students of superior ability may complete the requirements in less time. As a rule, the senior year or the last two semesters are to be spent in residence at the College. However, students who have had one full year of residence previous to the senior year, and who apply for and are approved by the Academic Appeals Committee for off-campus study programs during the senior year, will be permitted to count that work toward graduation requirements.

Library and Media Center

The library serves the Bethany community in the following ways:

- By acquiring and making available traditional and non-traditional forms of information and knowledge
- By providing support, guidance, and training in the selection and use of information sources
- By helping students learn to evaluate information
- By helping faculty and students realize the goals of specific courses
- By promoting awareness of issues concerning the accessibility to and distribution of information
- By keeping the community abreast of developments in information technology and resources

- By collecting, preserving, and providing access to archival materials documenting the history of the College and Alexander Campbell, its founder

The primary center for library services and resources is the T.W. Phillips Memorial Library, which houses the Media Center and the Center for Campbell Studies. In addition to the collections housed in the main library building, the library assists in maintaining specialized library-reading rooms at various locations on campus for chemistry, economics, education, and law. The main library is open ninety hours per week when classes are in session. Library personnel provides library and media services throughout the campus and access to collections and databases worldwide through interlibrary loan and computer networks.

Pre-Professional Study

Bethany offers pre-professional study programs in:

- Engineering
- Medical and Health Professions
- Law
- Ministry

The Bethany engineering program permits students to earn both a bachelor's degree from Bethany and a B.S. in engineering from a cooperating engineering school upon completion of a five-year sequence. Students spend three years in the liberal arts environment of Bethany and then attend Case-Western Reserve University, Columbia University, Georgia Institute of Technology, or Washington University for an additional two years.

Students desiring to prepare for the study of medicine, dentistry or any other health related field find instruction and facilities at Bethany which satisfy the entrance requirements for the best professional schools. Medical admission tests must be taken in the junior year and specific course planning is required, beginning with the first semester of the freshman year. Bethany also provides a degree program for certified allied health professionals who have completed accredited technical programs at other institutions.

No single curricular pattern is recommended as preparation for law school, but Bethany provides the key ingredients for entrance, such as breadth of knowledge and high levels of achievement in writing, critical thinking, and logical reasoning.

Students planning to enter church vocations complete their preparation in seminaries and graduate schools of religion after undergraduate pre-seminary studies at Bethany.

Bethany also provides thorough preparation for professions in the fields of business administration, communications media, public administration, teaching at all levels, social work, and many more. Students are encouraged to contact individual academic departments, as well as the College's Office of Career and Professional Development, for academic and career planning.

Professional Core Program

The Professional Core Program is an option for every Bethany student. In electing a Professional Core, in addition to a field of concentration, students broaden their possibilities for employment and their options for graduate or professional study.

Professional Core programs are available in:

- **Management**
- **Public Affairs (Public Policy/Administration)**
- **Communication (Marketing or Electronic Media)**
- **Science and Technology (Computing or Pre-Professional Health Science)**
- **Foreign Languages (French, German, or Spanish)**

Management: to assist students in describing and determining the roles, reactions, and relationships of individuals and groups within a management structure. Students completing this core should have the capacity to enter a management position in business, public agencies, schools, and other organizations with a high level of understanding and skill in dealing with management issues. Required are 24 hours including Accounting 211, Economics 200 and 280, Psychology 287, and eight hours chosen from Economics 111, 286, Communications 302, Computer Science 140, 144, Politics and Public Policy 227, 300, and Sociology 309.

Public Affairs: to become knowledgeable about the nature of problems in the broad area of public affairs and to be able to deal with issues of public policy and public administration. Completion should enable the student to analyze and assess public policy issues and needs, to implement and administer public policy programs, to develop public policy plans, and to evaluate public programs. Required are 16 hours: Politics and Public Policy 231, 232, 300 and Economics 200. An additional six hours are to be taken from Politics and Public Policy 331, 332; Economics 280, 302; Sociology 205, 309; Psychology 287; Mathematics 281; Communications 402; or Computer Science 140, 144.

Communication: to develop the student's facility to understand and to use techniques of effective communication to wide audiences. Within this core, two options are available, one in Marketing and the other in Electronic Media. Marketing focuses on a variety of communication needs within the world of business and industry. Electronic Media focuses on radio and television as media for mass communication. For Marketing, required are 24 hours from Communications 101, 301, 302; Economics 111 and 290; English 205; Psychology 287. For Electronic Media, required are 22 hours from Communications 101, 201, 261, 271, 304, 310, 311 and Fine and Applied Arts 315.

Science and Technology: to provide a basic knowledge in one of two areas, Computing and Pre-Professional Health Science. The Computing option aims at providing a working knowledge of computers, especially as related to the student's regular field of concentration, thus providing job-entry skills not typically available to those studying in traditional liberal arts fields. The Pre-Professional Health Science option provides a basic science education for those interested in pursuing health-related professions, including those seeking entrance to medical schools, veterinary medicine schools, or other professional schools. This curriculum provides the basic elements usually expected of applicants to such schools.

In Computing, 12 hours are required, including Computer Science 201, 202, 450; and any one of the following: Computer Science 140, 142, 143, or 144. In Pre-Professional Health Science, 40 hours of course work grouped from Animal Biology, General Chemistry, Organic Chemistry, Physics, Calculus, and English. Students should carefully select courses in consultation with their advisors and the Health Science Committee. Students selecting Pre-Professional Health Science must submit a separate list of courses in their program as worked out with advisors.

Foreign Language: to establish a functional command of the language and a basic knowledge of the target culture of French, German, or Spanish. This Core enhances communication skills and intercultural awareness important for entry into internationally-related fields. Required are 16 hours above the 230 level. The 110, 120 and 230 pre-requisite courses may be acquired at Bethany or may be waived through the normal evaluation procedure of the Department of Foreign Languages. Four hours or more of study abroad credit may be used to replace one of the Conversation and Composition courses (240, 241).

For French, 16 hours are required as follows: French 240, 241, 313, and 351 or 352. For German, 16 hours are required as follows: German 240, 241, 312, and 351 or 352. For Spanish, 16 hours are required as follows: Spanish 240, 241, 310 or 311, and 357 or 358.

Work Internships

Students may spend a semester combining practical professional experience with formal off-campus study. A student wishing to do this must obtain a full-time job in his or her chosen area and arrange independent study credit which will integrate this work experience with formal theoretical study.

A written proposal, signed by the department in which the student intends to earn academic credit, approved by the Faculty Curriculum Committee. This proposal must be signed by the faculty member charged with supervising and evaluating the project. The proposal must provide a description of the student's goals in undertaking the program, a description of the experience including a summary of his or her responsibilities and the name of his or her supervisor, a description of the formal independent study course work, an explanation of the way in which the program will integrate the work experience and the formal independent study course work, and a description of the methods to be used in supervising and evaluating the entire project.

Students may earn eight credit hours upon satisfactory completion of the project. No additional academic work may be taken during the semester of the project.

Washington Semester

One or two advanced students in history, politics and public policy, economics, or sociology may pursue studies in these fields under the direction of the American University in Washington, D.C. A student participating in this plan takes six to nine hours in regular academic work and six to nine hours in the study of government supervised by Bethany College and American University. Participants in the program must be recommended by the program advisor and have the approval of the Dean of the Faculty.

State Government Study

The Departments of History and Politics and Public Policy administer a program in conjunction with the West Virginia University Foundation in which an outstanding junior or senior is selected each year to spend one week in Charleston, W. Va., studying the three branches of state government. Students may earn two hours of credit for this program.

Study Abroad

Qualified students may earn academic credit for formal study completed in foreign countries. To be eligible for study abroad, a student should normally have junior standing. Approval by the faculty International Education Committee is required.

Several programs for study abroad are part of the Bethany curriculum:

Heidelberg Program

Qualified students work out individualized programs of intensive study in the German language at the university level in Heidelberg, Germany.

Oxford Semester

Approximately twenty students spend the fall semester in Oxford, England with a Bethany professor studying British literature, history, and culture. Participants are full-time matriculated Bethany students, but live and study in Britain.

Paris Sorbonne Program

By special arrangement with the Sorbonne, qualified Bethany students may enroll for a semester or a full year in its Cours de Langue et de Civilisation Française. A Bethany representative in Paris serves as counselor to Bethany's students during their stay at the Sorbonne.

Spain Study Program

Through special arrangement with universities in Pamplona and Salamanca, qualified Bethany students may enroll for a semester or full year.

Other Programs

Bethany students have participated in additional programs for study abroad. The Director of International Education Programs can provide interested students with information about programs which have been examined and approved.

Career and Professional Development

Bethany's Office of Career and Professional Development assists students and alumni in planning careers and obtaining both temporary and permanent jobs. Career counseling is provided and workshops are presented on such topics as resume writing, interviewing, job hunting, and skills identification. The Office coordinates and schedules on-campus recruiting. It also maintains a Career Resource Center consisting of career planning literature, job announcements, a volunteer contact network of alumni and friends of the College, material on internships and graduate and professional school information. Free credential service is available to all seniors and alumni who register with the Office.

Academic Common Market

Bethany is a member of the Academic Common Market, an interstate agreement among southern states for sharing academic programs. This agreement allows Bethany students, who qualify for admission, to apply for enrollment in 80 graduate degree programs in other common market states on an in-state tuition basis. The Southern Regional Education Board sponsors this program. Further information

concerning the Academic Common Market is available at the Office of Career and Professional Development.

External Programs

Bethany College develops special programs for older adults through intensive, short-term residential and off-campus seminars, institutes, courses, and workshops. These programs generally serve business, industrial, educational, professional, and church organizations.

Each summer, the Bethany campus and facilities are used for camps for youth, including camps for sporting activities, church groups and musical groups. Retreats and workshops also are conducted on the Bethany campus.

Educational Resources

Substantial resources are invested in the education of Bethany students. The gross assets of the College on June 30, 1988, totaled \$48,246,659. Facilities and equipment at book value were \$25,212,493 with a replacement value of approximately \$39,495,790. The market value of all endowment funds was \$22,426,906.

More than 30 academic, administrative, and residential buildings are located on the 1,600 acre campus. The principal structures are:

Old Main (1858) is the centerpiece of Bethany's academic buildings. Its tower dominates the campus and is the chief architectural feature noted as one approaches the College. Old Main is listed in the *National Register of Historic Places*. The building is one of the earliest examples of collegiate Gothic architecture in the United States. Old Main restoration work has been under way since 1977 with approximately \$3.5 million invested in the project.

Commencement Hall (1872) provides the setting for convocations, concerts, lectures, dramatic presentations, and other gatherings. During 1983-1984, the Hall was restored to its original state.

Grace Phillips Johnson Visual Arts Center (1984) offers facilities for computer graphics, television, painting, sculpture, and design. The Sandra Weiss Berkman Studio for Ceramic Arts is adjacent to the Center. The building was formerly Irvin Gymnasium (1919). Complete renovation accomplished during 1983-1984 makes this an outstanding facility for instruction in the visual arts.

Richardson Hall of Science (1964) provides contemporary facilities for the chemistry, physics, and mathematics departments and houses the Academic Computer Center. It is named for Robert Richardson, Bethany's first science professor.

David and Irene Steinman Fine Arts Center (1969) provides excellent facilities for music and theatre. A fully equipped theatre occupies the central portion of the building. Teaching studios, studio-classrooms, a general rehearsal room for the larger vocal and instrumental groups, and individual practice rooms support instruction in music.

Cramblet Hall (1905) was constructed through a gift from Andrew Carnegie. Originally the library, it was remodeled in 1961 to house administrative offices. It is named in honor of two presidents of the College, Thomas E. Cramblet and his son, Wilbur Haverfield Cramblet.

Cochran Hall (1910) was built as a men's residence by Mark M. Cochran of the class of 1875. The interior of the building was completely remodeled during 1974-1975 to serve as a site for faculty offices and student conferences.

Oglebay Hall (1912) accommodates the laboratories and classrooms for the biology and psychology departments. The building was a gift of Earl W. Oglebay of the class of 1869.

Pendleton Heights (1841) was built during the College's first year by W. K. Pendleton, a member of the first faculty and second president of the College. Today it serves as home for Bethany's president. Pendleton Heights is listed in the *National Register of Historic Places*.

Renner Union-Bethany House (1948) is the student union. Here are found the campus radio station, the College bookstore, a student photographic darkroom, music listening rooms, a spacious lounge, and the Admission Office. The alumni joined in 1969 with the R. R. Renner family of Cleveland, Ohio, to remodel this facility.

Benedum Commons (1969) is the modern, air-conditioned dining facility for all Bethany students. In addition to the main dining room, "The Ogden Room," the building houses a snack bar, lounge facilities, and several small dining rooms, including "The Berkman Room," for special student and faculty events.

John J. Knight Natatorium (1967) contains a six-lane, 25-yard, heated pool which is used in the physical education program and for intercollegiate competition. It is named for John J. Knight, long-time director of athletics. Four tennis courts are located next to the natatorium.

Alumni Field House (1948) provides physical education facilities for men and women. It is also used for concerts. Adjacent to the field house are football, soccer, and baseball fields, tennis courts, and a quarter-mile track.

The T. W. Phillips Memorial Library (1959) serves as the hub for an academic information network that provides the campus with over 250,000 items locally (books, periodicals, newspapers, microforms, pamphlets, audiovisuals, archival materials) and access to millions of titles across the nation and around the world through OCLC, Dialog, and other computer networks. The Center for Campbell Studies, housed in the Library contains books, periodicals, letters, paintings, photographs, and museum pieces related to Bethany's founder and first President, Alexander Campbell. The Media Center, also located in the Library, provides instructional media equipment, materials, laboratories, and production facilities.

The Leadership Center

Millsop Building (1972) is the world's first solarized satellite receiving center and houses offices, seminar rooms, exhibition areas, and a 123-seat circular conference room for continuing education activities. The center offers a regular series of conferences, seminars, and workshops for education, business, and professional groups. It is a memorial to Thomas E. Millsop, former president and chairman of the National Steel Corporation.

Gresham House (1972) is a guest facility which provides 40 rooms for overnight accommodations for visitors to the College. It is named for Dr. Perry E. Gresham, Bethany's twelfth president, and his wife, Aleece.

Harder Hall (1981) is an educational laboratory and dining facility. It adjoins Gresham House, the forty-room overnight guest facility. It honors Delmar C. Harder, a pioneer in automation in the American auto industry.

College, Student Life

Education at Bethany is an experience in integrated living and learning. The College community offers a great variety of activities, and students are encouraged to participate in those which best complement their educational experience. Many opportunities for leadership experience are provided.

Bethany encourages mature and responsible citizenship by its students. The College believes this citizenship is realized through the measured personal freedom of each individual, and the community-building efforts of students, faculty and administrators. College officials intervene when the rights and privileges of some are threatened by the actions of others.

During the 1985-1986 academic year, students, faculty and trustees cooperated in writing a Compact for Bethany College. The Compact is a general statement of philosophy, aspiration, and expectation regarding the way the entire Bethany community is to live together. All members of the College are urged to read and live up to the ideals of this statement. It can be found in the Bethany College Student Handbook.

Student Government

The Student Board of Governors, composed of representatives from all residence groups, manages a substantial budget and appropriates funds for a wide variety of student activities. Students are appointed to many faculty committees, including those concerned with curricula, athletics, religious life, international education, cultural and speakers' programs, and others.

Residence halls help to shape the social life of the campus. Fraternities, sororities, and house associations accommodate all upperclassmen in small, self-governed units. Students are responsible for their conduct in the residence halls, for academic, cultural and social programming sponsored by the halls, and for care of the facilities. Freshmen, soon after their arrival, organize and send representatives to student government.

Residence Life

Most Bethany residences are small housing units accommodating 32 or 48 students and containing social and recreational facilities.

Freshmen live in somewhat larger residence halls, but are granted many of the same freedoms and responsibilities of the upperclassmen. Head residents and student resident assistants provide leadership and counsel to freshmen.

Phillips Hall, one of two freshmen women residences, is the most gracious residence hall on campus. Built in 1890, it was remodeled and restored in the late 1970s. The ground floor now houses a large, multi-purpose recreation room, Renner Too, and Maxwell's Coffee House and kitchen facilities.

Social, Fraternal Life

Fraternities, sororities and independent house associations constitute the primary social groups of upperclass men and women on campus. The six fraternities and four sororities are nationally affiliated and their members constitute approximately 60 percent of the student body. Representatives from each serve on agencies which coordinate fraternal affairs and activities.

Fraternities represented are Alpha Sigma Phi, Beta Theta Pi, Delta Tau Delta, Kappa Alpha, Phi Kappa Tau and Sigma Nu. Sororities are Alpha Xi Delta, Kappa Delta, Phi Mu and Zeta Tau Alpha.

The student-run Renner Union Program Board is responsible for programming a wide range of activities on campus. These include cultural events, such as opera, dance, and art exhibits, as well as popular events, such as concerts, dances, and other social activities.

In the past few years, Bethany programs centering on international business, American business, and American politics have brought an array of distinguished speakers and visitors to the campus to meet with students and faculty. These programs have featured a former President of the United States, three United States Senators, two Governors, a former Governor, an Ambassador, five corporate chief executive officers, and a dozen or more leaders in the fields of public affairs, business, sciences, and the arts.

Other activities on campus which are well supported by student participation include theatre, various musical groups, intercollegiate and intramural sports, and a score or more student-run clubs. The campus media (a weekly newspaper, a yearbook, a magazine, a literary magazine, an FM radio station, and a cable TV station) command much student interest and participation.

Religious Life

Many religious backgrounds are represented in the student body and faculty. Although participation is voluntary, there are many opportunities for religious activity on campus.

Many students find Bethany Memorial Church an opportunity for expression of their religious faith. The minister of this church, who is also the College Chaplain, is available to students for counseling and advice on personal and religious matters.

The Bishop of Wheeling-Charleston Diocese of the Roman Catholic Church provides a chaplain and chapel for Catholic students. The chaplain is available daily for counseling, in addition to the celebration of Mass each Sunday and on holy days.

The Jewish fellowship meets for worship and study. Jewish congregations in Steubenville and Wheeling sponsor the fellowship and entertain Jewish students for the high holidays.

Student Regulations

The *Student Handbook* contains a complete description of the regulations pertaining to housing, dining facilities, health services, motor vehicles, use of alcoholic beverages and drugs, eligibility requirements, and other areas of student life. However, applicants for admission should know the following in advance:

- 1) The College expects and enforces lawful behavior in all matters. Particular emphasis is placed upon respect for the rights of others and upon other principles of good citizenship.
- 2) With the exception of commuters (i.e. married students or students living with parents) all students are required to live in College residence halls or fraternity or sorority houses unless excused by the Dean of Students.
- 3) All students, except commuters, are required to board in the College dining hall unless excused by the Dean of Students. No refunds are granted for meals missed.
- 4) Freshmen are not permitted to bring automobiles to Bethany unless the request is approved by the Dean of Students and the vehicle is properly registered.
- 5) Violations of regulations which are not adequately dealt with by the self-governing housing unit are judged or otherwise disposed of by the Dean of Students.

Student Health Services

All students entering Bethany for the first time are required to submit a completed physical examination form before registration. The College health service is maintained by student fees, and all students are entitled to nursing service and specified access to a physician. A minimum charge for prescription medicines, ointments, or injections may be added to the student's account under certain conditions.

The Bethany infirmary is on 24-hour call for illnesses and injuries which occur during the academic year. Service is not available at the infirmary during vacations and recess periods. Students who suffer serious illness and accidents are usually treated at the Wheeling Hospital, located 15 miles from the town of Bethany. Ambulance service for emergencies is available.

The College physicians have regular office hours during the week for free consultation. In case of an emergency operation, when the parents cannot be reached, the Dean of Students, upon the recommendation of the College physician, assumes the responsibility of giving permission for treatment.

Bethany provides medical, surgical, and hospitalization insurance. All students are automatically included in the coverage from September 1 to August 31 and are charged accordingly unless the appropriate waiver is forwarded to the Business Office. Expenses for outside consultation and treatment are the responsibility of the student in all cases when not covered by insurance.

Bethany has had a substance abuse program on campus since 1981, which has been continually refined and improved in the light of national trends and current information. The program is under the leadership of the Head of the Social Work Department, in association with the staff of the Dean of Students office, the Health Services Staff, the Counseling Staff, and off-campus Certified Alcohol and Substance Abuse Counselors. Through the program, the College provides community-wide educational workshops, support groups, and intervention for those in jeopardy.

Intercollegiate Athletics, Intramurals, Recreation

Bethany College is a member of Division III of the National Collegiate Athletic Association. Women's and men's teams participate in the Presidents' Athletic Conference. Members of the Conference, in addition to Bethany, are Carnegie-Mellon, Grove City, Thiel, and Washington & Jefferson. Men's teams compete in baseball, basketball, cross country, football, golf, soccer, swimming, and track. Women's teams compete in basketball, field hockey, soccer, softball, and volleyball. Individual women may also participate in cross country, swimming, and track.

Club sports teams provide intercollegiate competition in men's ice hockey and men's and women's lacrosse.

Recreation is available for the entire student body through extensive intramural and open recreation programs. Facilities are located on campus and nearby for football, racquetball, softball, baseball, basketball, volleyball, soccer, tennis, swimming, golf, cross country, track, table tennis, bowling, wrestling, badminton, horseback riding, body mechanics, dancing, gymnastics, aerobics, skiing, jogging, camping, hiking, and nature study.

Scholarships, Recognition Awards

Bethany recognizes promise and intellectual attainment by awarding a large number of scholarships. These awards vary in value and are available to a limited number of entering students. Most scholarships are awarded to freshmen on a four-year basis but are continued from year to year only if the recipient has met the following conditions:

- A satisfactory scholarship index
- Satisfactory conduct as a student
- Worthwhile contributions to the College program
- Constructive citizenship in the College community
- Payment of student accounts as scheduled

Each fall Bethany holds the **Competitive Scholarship Opportunity**, a program which offers tuition grants, regardless of financial need, in areas of social sciences, physical and life sciences, and the humanities. These scholarships are awarded on the basis of performance on a competitive examination, secondary school record, standardized test scores, and personal qualities.

Each spring Bethany offers its **Kalon Leaders Program** in which participants vie for four-year tuition grants, also regardless of financial need. Selection is based upon past leadership achievements, secondary school record, a required essay, references, and interviews by Bethany faculty.

Bethany offers a wide range of scholarships, designated and external trust scholarships, as well as sustained awards and loan funds.

These awards, most named for distinguished alumni and faculty members and friends of the College, are awarded to worthy and eligible students. Some are designated for specific fields and interests.

Awards are made by the President and by the Scholarship and Financial Aid Committee in accordance with the requirements of a particular endowed fund.

A complete listing of all scholarships is available from Bethany's Office of Development, the Office of the Dean of the Faculty, and the Office of the Dean of Students.

Achievement Recognition

Bethany encourages achievement in scholarship and leadership in student affairs by public recognition at Commencement, Honors Day, and on other suitable occasions.

Graduation Honors

Students who have done academic work of unusual merit are graduated with honors: *Summa Cum Laude* (3.85); *Magna Cum Laude* (3.65); *Cum laude* (3.35). The awarding of honors is determined upon the basis of total quality points earned, performance on the Senior Comprehensive Examination, and the recommendation of the student's advisor.

Senior Fellowships

Certain members of the junior class may be designated as senior fellows for the following year. The selection is made from students who have demonstrated unusual excellence in their field of concentration and the character and ability to do special work ordinarily as an assistant in instruction or research.

No more than twelve full-year senior fellowships and one senior fellowship at-large or the equivalents are awarded in any one year. Usually no more than one full-year fellowship or the equivalent is awarded in any one department. Although the title of senior-fellow-at-large is primarily for capable students in interdisciplinary programs, students in other fields of concentration may be nominated for this category.

The selection of senior fellows is made by the Honors Committee, usually from nominations presented by department heads.

Dean's List

At the end of each semester students who have demonstrated a high level of academic achievement (grade point average of 3.65 or better) and have completed at least 12 graded hours during the semester are designated as "Students Distinguished in Scholarship." Often called the Dean's List, this distinction is determined by the Honors Committee.

Honor Societies

A number of honor societies have been established at Bethany through the years to recognize academic achievement and campus leadership.

Gamma Sigma Kappa is a scholastic society founded at Bethany in 1932. Degree-seeking students who have achieved a cumulative scholarship index of at least 3.70 (over at least four consecutive semesters and provided that in no semester their scholastic index falls below a 3.00 and provided the student has completed at least 12 graded hours in each of the semesters) may, upon recommendation of the Honors Committee, be considered for membership. Usually, however, not more than 10 percent of any class will be recommended.

Bethany Kalon is a junior and senior society established in 1948 to give recognition to students of high character who have demonstrated competent and unselfish leadership in student activities and have been constructive citizens of the College community. Selection is made by the members of the society with the advice and approval of the Honors Committee.

Alpha Phi Chapter of Beta Beta Beta is for students of the biological sciences. Its purpose is to stimulate sound scholarship, to promote the dissemination of scientific truth, and to encourage investigation into the life sciences.

Alpha Beta Gamma is an honorary organization in education dedicated to recognizing and fostering professional concern, involvement, and experience in education.

Gamma Upsilon Chapter of Lambda Iota Tau. Lambda Iota Tau is an international honor society for the encouragement and reward of scholastic excellence in the study of literature. Membership is limited to juniors and seniors who have a cumulative scholarship index of 3.0, who have completed a minimum of 12 semester hours of literature courses with at least a 3.0 grade-point average in them and in all prerequisite courses, and who have presented a scholarly, critical, or creative paper which has been accepted by the chapter. The chapter presents an annual award for the best senior project in literature. Lambda Iota Tau is a member of the Association of College Honor Societies.

Alpha Chapter of Omicron Delta Epsilon, an international honor society in economics, was established in 1960 to recognize excellence in the study of economics. Membership is limited to students who have completed a minimum of 16 semester hours of economics, including either Economics 301 or 302, and who have achieved both a departmental and overall grade-point average of 3.25 or better.

Beta Gamma Chapter of Alpha Psi Omega. Alpha Psi Omega is a national recognition society in dramatics. Students qualify by faithful work in playing major and minor roles or working with technical or business aspects of theatre.

Mu Epsilon Chapter of Phi Alpha Theta was established at Bethany in 1967 to recognize excellence in the study of history. Its membership is limited to those students who have completed at least 12 hours of history with a grade-point average of 3.1 or better and with at least a 3.0 grade-point average in two-thirds of all other studies. Members must also rank in the upper 35 per cent of their class.

Bethany Chapter of the Society for Collegiate Journalists, a national recognition society in journalism, is designed to stimulate interest in journalism, foster the mutual welfare of student publications, and reward journalists for their efforts, service, and accomplishments.

Kappa Xi Chapter of Sigma Delta Pi is an honor society for those who attain excellence in the study of the Spanish language and the literature and culture of the Spanish peoples. Students who are at least second semester sophomores and have a high scholastic index and who have completed at least one advanced course in Spanish literature are eligible for membership.

Epsilon Chi Chapter of Kappa Pi is for students of graphic arts. Its purpose is to uphold the highest ideals of a liberal education, to provide a means whereby students with artistic commitment meet for the purpose of informal study and entertainment, to raise the standards of productive artistic work, and to furnish the highest reward for conscientious effort in furthering the best interest in art in the broadest sense of the term.

Alpha Chapter of Kappa Mu Epsilon, a national honor society in mathematics, was established in 1975 to recognize outstanding achievement in mathematics. Its membership is limited to those students who have completed at least three semesters at Bethany, rank in the upper 35 per cent of their class, have completed at least three mathematics courses, including one semester of calculus, and have a grade-point average of 3.0 or better in all mathematics courses.

Sigma Tau Epsilon music honorary promotes participation and appreciation of music by encouraging attendance at recitals, sponsoring field trips to concerts, and providing an opportunity for students of music to meet and exchange ideas. The honorary also encourages participation in College musical groups and solo recitals while upholding high standards of musical performance. Qualifications for membership include active participation in College musical organizations.

Phi Delta Psi is a physical education honorary for both men and women which encourages scholarship, leadership, fellowship, high educational standards, and participation in departmental activities. To be eligible, students must be at the second semester level of the sophomore year and achieve a grade-point average of at least 3.0.

Pi Gamma Mu is a social science honorary for men and women who have achieved high academic standing in the study of history, economics, political science, sociology and geography. A 3.0 average in at least 20 hours of study in these fields and standing in the top 35 percent of their class are required for membership.

Pi Alpha Chapter of Gamma Sigma Epsilon, a national chemistry honorary, was established at Bethany in 1989. Its purpose is to promote and recognize interest, scholarship, and research in the field of chemistry. Students are elected from those who have completed a minimum of 16 semester hours of chemistry with at least a 3.00 grade point average and an overall grade point average of 2.75 or from students recommended by faculty in the Chemistry Department.

Awards

Oreon E. Scott Award is presented to the graduating senior who has achieved the highest academic record over a four-year period of study. The donor of this award was a long-time Bethany trustee and a graduate of the class of 1892.

Anna Ruth Bourne Award stimulates scholarship among the women's social groups. A silver cup, provided by an anonymous donor in honor of the former distinguished head of the English Department, is awarded to the recognized women's group whose active membership earns the highest scholarship standing each semester. The group winning the cup for four semesters is presented with a smaller replica as a permanent trophy.

W. Kirk Woolery Award encourages scholarship among the men's social groups. A silver cup, donated by friends of the late Dr. Woolery, a former Dean and Provost of the College, is held by the recognized men's social group or housing organization whose

membership (active membership only in the case of fraternities) earns the highest scholarship standing each semester. Any group winning the cup for four semesters is presented with a smaller replica as a permanent trophy.

The Beta Beta Beta — B. R. Weimer Award, established in honor of the late Bernal R. Weimer, Professor of Biology and Dean of the Faculty, is given each year to the senior in biology who has attained the highest academic rank in this field of concentration.

The Beta Beta Beta Prize is awarded the student who has received the highest grades in the initial courses in biology.

Florence Hoagland Memorial Award, given by a graduate of the class of 1944, is presented to the outstanding senior English major. The award honors the memory of the late Miss Hoagland who was for many years Professor of English at Bethany.

Christine Burleson Memorial Award, given by a graduate of the class of 1936, is presented to a senior English major who has attained excellence in this field of concentration. The award honors the memory of the late Miss Burleson who was Professor of English and Dean of Women from 1932 to 1936.

Cammie Pendleton Awards, named in honor of Miss A. Campbellina Pendleton, Professor of Language and Literature at Bethany from 1884 to 1909, are presented to the outstanding junior and sophomore concentrating in English. The awards are given by Dwight B. MacCormack, Jr., of the class of 1956, in memory of his grandmother, Dr. T. Marion MacCormack.

E. E. Roberts Distinguished Prize in Campus Journalism is awarded to an outstanding student who excels in work with one of the student media, in academic work in the Department of Communications, or both.

Winfred E. Garrison Prize is presented in recognition of outstanding achievement in one or more areas of philosophy. The award honors the memory of the late Dr. Winfred E. Garrison, a member of the class of 1892, whose humane concerns and scholarly achievements contributed significantly to the area of higher education, history, and philosophy.

Freshman Chemistry Award is presented each year to the student who attains the highest grade-point average in a freshman-level chemistry course.

Outstanding Junior Woman Award is provided by the Pittsburgh Bethany College Club, comprising the Bethany alumnae of Pittsburgh. This award is based on qualities of leadership, character, conduct, and scholarship. The club has placed a plaque in Phillips Hall on which names of the winners are engraved. In addition, an individual gift is made to the recipient.

Vira I. Heinz Award is granted to the junior woman who has distinguished herself by leadership, character, conduct, and scholarship and whose proposal for foreign travel most significantly supplements her educational objectives. This award for summer travel is provided by the fund of the late Vira I. Heinz, recipient of the honorary Doctor of Religious Education degree from Bethany in 1969.

Benjamin Chandler Shaw Travel Award is granted to the junior man who has distinguished himself by leadership, character, conduct and scholarship and whose proposal for foreign travel most significantly supplements his educational objectives. This award is funded by an anonymous friend of the College in recognition of the late Dr. Shaw, Bethany's George T. Oliver Distinguished Professor of History and Political Science Emeritus. Dr. Shaw joined the Bethany faculty in 1935, served from 1945 to

1966 as head of the Department of History and Political Science and continued part-time until 1975.

The Richard B. Kenney Freshman Leadership Award is granted to a freshman who has demonstrated outstanding scholarship, leadership, and character at Bethany, who has become actively involved in Bethany, and who has contributed service and devotion to the College community. The student must achieve at least a 3.50 grade point average during the first fall semester at Bethany. The award honors the late Richard B. Kenney, T. W. Phillips Professor of Old Testament Literature who taught at Bethany from 1964-1986. The Award was established by the Freshman Activities Council of 1986-1987.

Bettie Blanck Travel Award is made to the student whose proposal for foreign travel best promises to augment study in English literature. The award was established by Thomas A. Hopper, class of 1967, in honor of his mother, a member of the Class of 1944.

W. F. Kennedy Prize is given to the outstanding young man in the junior class. This award, established by W. F. Kennedy of Wheeling, West Virginia, is awarded on the basis of the student's contribution to the College community life through leadership in activities, in personal character, and scholarship.

Pearl Mahaffey Prize is awarded to the outstanding senior major in Languages. The award was established by Mrs. Walter M. Haushalter and other former students of Bethany's emeritus professor of foreign languages. The prize honors Miss Mahaffey, a faculty member from 1908-1949 and a trustee of the College at the time of her death in 1971.

Shirley Morris Memorial Award was established by Theta Chapter of Zeta Tau Alpha in memory of Shirley Morris, a loyal member and past president of the chapter. It is given to an outstanding student in the field of modern languages. Selection is made by the Department of Foreign Languages.

Margaret R. Woods Prize, sponsored by the Kappa Xi Chapter of Sigma Delta Pi, is awarded to the outstanding Spanish major. The prize honors Miss Woods who was a faculty member from 1943 until her retirement in 1965. Selection is made by the Department of Foreign Languages.

Auguste Comte Award is presented to the senior of the Sociology Department for outstanding scholarship and keen interest in the field. The award is named after the founding father of the discipline.

Charles H. Manion Award is made to the outstanding senior in Fine and Applied Arts with an emphasis in one of the Art areas. The award memorializes Charles H. Manion, long-time trustee of Bethany College who was associated with the steel industry in the Ohio Valley and who enjoyed painting. The prize is provided by his daughter, Mrs. Leonard Yurko, Weirton, West Virginia.

Theodore R. Kimpton Prize is awarded to the outstanding French student. This prize, which is restricted to those students whose native language is other than French, was established by Theodore R. Kimpton, assistant professor of foreign languages at Bethany prior to his retirement from full-time teaching in 1975.

George K. Hauptfuehrer Award in Music is sponsored by the Sigma Tau Epsilon in honor of George K. Hauptfuehrer, Professor of Music and Head of the Department of Music Emeritus. The award is presented to the Bethany student who has demonstrated musical excellence and has participated actively in campus musical organizations. Preference is given to seniors.

J. S. V. Allen Memorial is a fund established by the family and friends of Professor Allen to provide for an annual award to the outstanding physics student.

Frank Alfred Chapman Memorial is a fund established by Dr. Stanton Crawford to provide for an annual award to the outstanding history student. Preference is given to students of American history and the Ohio Valley.

Osborne Booth Prize is given to the student who excels in the field of religious studies and in the overall academic program. The late Osborne Booth was T. W. Phillips Professor of Old Testament when he retired in 1964 after 35 years of teaching at Bethany.

The Aleece C. Gresham Award, announced each spring at the May Morning Breakfast honoring senior women, was initiated in 1987 and is presented to a senior woman who has attended Bethany for at least five semesters. To be eligible for selection, senior women must have a grade point average of at least 2.5 or better, have participated in and displayed leadership in a variety of co-curricular activities, and must have shown dedication and commitment to Bethany College.

Francis O. Carfer Prize is given to the senior who, in the judgment of the Honors Committee, has made the most outstanding contribution to the College. Mr. Carfer, a trustee of Bethany College for 29 years, was a graduate of the class of 1909. Recipients of the award must display sound academic accomplishments and characteristics of loyalty, service, and devotion to Bethany.

W. H. Cramblet Prize recognizes outstanding achievement in mathematics. It is named in honor of Wilbur H. Cramblet, the eleventh president of Bethany College.

John J. Knight Award is presented to the senior male Physical Education major displaying outstanding scholarship and athletic participation during his four years at Bethany.

S. Elizabeth Reed Award is presented to the senior woman showing outstanding scholarship and athletic participation during her four years at Bethany.

Frank Roy Gay Award, established in 1982, is given to the senior interdisciplinary major who maintains a grade point average of 3.5 or above and displays outstanding leadership qualities in the Bethany community. The award is named for the former Professor of Classics at Bethany who taught English literature, religion, and philosophy.

A. Kenneth Stevenson Theatre Award is presented each year to the outstanding Bethany junior or senior of any discipline with a grade point average above 3.2 who has contributed the most significantly to Bethany College Theatre activity. The award also provides for guest artists to enhance the program in Theatre. A. Kenneth Stevenson of Washington, Pa., was a long-time supporter of the Bethany College Theatre program until his death in 1979. Mrs. A. Kenneth Stevenson, her sons, Drew and Mark, both graduates of Bethany, and members of the Department of Fine and Applied Arts make the yearly selections.

Forrest H. Kirkpatrick Award is presented annually to the outstanding senior concentrating in economics and business. The award is named in honor of Dr. Kirkpatrick, long-time professor and dean of the College.

The Rush Carter Prize in music is presented to a member of the senior class in recognition of outstanding achievement in music. The prize honors the memory of the late Professor Carter who was a member of the Bethany faculty from 1934 to 1945.

The Edna W. Woolery Bibliography Prize is awarded to a senior student and to a freshman student who have individually compiled a bibliography and who request that it be considered for receiving the award. Edna W. Woolery was a Librarian at Bethany during the 1950s. In the event that the Award, established in 1981, is not granted in any year, the funds are used to purchase Library books. Additional information is available from the Librarian.

Wall Street Journal Award is given to the student majoring in Economics who has the highest average in selected department courses and has shown strong participation in departmental activities.

Senior Chemistry Award is granted to the senior concentrating in chemistry who has achieved the highest cumulative average in the Department.

The Thomas R. Briggs Award is presented annually to the senior in psychology who has maintained the highest academic average in the department. The award is a memorial to the late Thomas R. Briggs, Class of 1978, recipient of the Psychology Society Award in 1978.

Society for Collegiate Journalists Award of Merit is presented to an upperclass writer or editor for significant contributions to campus student publications.

WVBC-FM Senior Award is given to the senior who for four years has lent qualities of dedication, loyalty, leadership, talent, and creativity to WVBC's operations.

WVBC-FM Talent Award is presented to the member of the WVBC staff who has offered the most outstanding continuous radio programming during the year.

Freshman Writing Prizes, provided by alumni and awarded by the Department of English, are given annually to the authors of the best essays written in Freshman Seminars. Each seminar leader submits the two best essays from the group and the winning essays are determined by a panel of judges.

Research Awards

The Gans Fund Awards are presented to juniors, seniors and graduates of the College who are engaged in approved study and research in some specific field of the sciences at Bethany College or elsewhere. The direct charge is "for the encouragement of research and discovery in the various fields of science." The awards were established by Wickliffe Campbell Gans of the Class of 1870 and Emmet W. Gans in memory of their father and mother, Daniel L. and Margaret Gordon Gans.

Academic Procedures

Course Load

A normal semester load is 16 hours. A student may elect activities courses such as music, chorus, band, physical education, up to two hours with no additional fee, making the maximum academic course load 16 hours plus two hours of activities courses. Permission to take additional courses must be obtained from the Dean of the Faculty. Fees will be charged for any such approved courses. Applications for excess hours are available in the Registrar's Office.

A full-time student is defined as any student carrying at least 12 hours per semester.

Course Offerings

Most courses listed in departments are offered annually. Many, however, are offered every other year and a few are offered in three-year cycles. Students should see respective department heads for long-range course planning.

Activity Courses

Some courses which emphasize practice and performance are listed as activity courses. Of the 128 semester hours of credit required for a Bethany College degree, no more than 8 credit hours may be earned in activity courses and no more than 4 of these 8 credit hours may be earned in activity courses offered by a single department. A student may enroll in additional activity courses which will be listed on official transcripts and become part of the student's cumulative record.

Independent Study

Each department offers independent study for those students who have demonstrated the ability to work individually in some area of special interest. The student selects an area of study, subject to the approval of the head of the department. Upon approval, the student then completes an Application for Independent Study in the Registrar's Office before the start of the semester.

Cross-Listed Courses

When a course which is part of a department's requirements for its field of concentration is cross-listed (among the course offerings in more than one department), a student concentrating in that field may register for the course in any department in which it is listed, but the course will count as part of the maximum credit which may be earned by the student within the department of his or her field of concentration.

Special Examinations

A student justifiably absent from a final examination or a test given in connection with regular class work is permitted to take a special test without payment of fees with the consent of the instructor and approval of the Dean of the Faculty. For any other examination a fee must be paid at the Business Office before the examination is taken, and the proper receipt must be presented to the instructor at the time of the examination.

Change of Schedule

During the first five class days of each semester, a student, with the approval of the advisor, may drop or add any course. No classes may be added after this time. A student may not withdraw from a full-semester course after the end of the ninth week of the semester or from a half-semester course after the end of the fifth week of the half-semester.

Class Attendance Policy

Students are expected to attend all class meetings and appropriate laboratory, discussion, and drill sections of their courses and to participate in all outside activities which are part of those courses.

Students may be granted official excused absences when they miss class for either of two reasons: (1) illness (as verified in writing by the Infirmary or another licensed provider of medical care); (2) participation in official college functions (as verified in writing by the Vice President for Student Services). It is the responsibility of the faculty to determine the nature of all other absences and to set proper responses to them, including possible academic penalties.

Grading System

Letter grades given and their equivalents in quality points are:

A..... 4.0	B— 2.75	D+ 1.25
A— 3.75	C+ 2.25	D..... 1.00
B+ 3.25	C..... 2.00	D—75
B..... 3.00	C— 1.75	F..... .00

Students are required to take at least 100 hours of letter-graded work.

Grades mean: A, *Superior*; B, *Excellent*; C, *Average*; D, *Below Average*; F, *Failure*.

Other report abbreviations and their meanings are:

- Cr.** *Credit*. No quality points.
- NCr.** *No-Credit*. No quality points or academic penalty.
- NG.** *No grade*. Used at mid-term only.

Inc. *Incomplete*. No quality points. Incomplete work is a result of sickness or some other justifiable reason. An incomplete must be removed by the end of the fourth week of the following semester, unless an extension of time is granted by the Dean of the Faculty. It is not possible for a student to remove an incomplete after 12 months.

W. *Withdrawn.* Indicates withdrawal from a full-semester course before the end of the ninth week of the semester, or withdrawal from a half-semester course before the end of the fifth week of the course. Carries no quality points or credit hours.

Any student who carries 12 hours of letter-graded academic work may elect to take additional work on a Credit-No Credit basis in courses which are not used for the field of concentration or the Perspectives Program or a Professional Core.

A report of the scholastic standing of students is received at the Registrar's Office at mid-semester in addition to the final semester reports. These reports are sent to the faculty advisor and the parents or guardians of each student.

Classification of Students

For sophomore rank a student must have at least 25 hours of academic credit. Admission to full junior standing is conditioned upon the student having at least 60 hours of academic credit. For senior class rank the student must have at least 94 hours of academic credit.

Students are not considered candidates for the baccalaureate degree until they have been granted senior classification, have filed an application to take the Senior Comprehensive Examination in their field of concentration, and have filed an application for a degree.

Probation

A satisfactory scholastic record at Bethany requires a student to have a semester's grade point average of at least 1.70 during the freshman year, 1.80 during the sophomore year, and 2.00 during the junior and senior years. Students who have failed to meet the academic standards expected by the College are placed on probation.

Probation is a warning to a student (and to the student's parents or guardians) that academic performance is unsatisfactory and that unless significant improvement is made, continuation at Bethany will not be permitted. At the end of a semester on probation a student's entire academic record is reviewed by the Academic Appeals Committee. Continued enrollment depends on the trend in academic performance. A student who is unlikely to meet the requirements for graduation in the usual four-year period may be dismissed. An extension of the four-year period is permitted only when there are extenuating circumstances.

Transcript of Records

Students wishing transcripts of records in order to transfer to other schools or for other purpose should make application to the Registrar's Office at least one week before the transcript is needed. Transcripts are issued only at the request of the student, and official transcripts are sent directly to the recipient specified by the student. One transcript is furnished to each student without charge; for each additional transcript a fee of \$1.00 is charged. When three or more transcripts are ordered at the same time, the first transcript is \$1.00, and the others cost \$.50 each. Fees must accompany the request. All financial obligations to the College must be paid before a transcript is issued.

Withdrawal

An honorable dismissal is granted to students in good standing who may desire to withdraw from the College if they have satisfied their advisor and a responsible officer

of the College that there is a good reason to justify such action. Students asking to withdraw should present a written request to the Dean of Students along with a statement of approval from parent or guardian. The recommendation of the Dean of Students is next presented to the Business Manager and then to the Registrar for final record. No withdrawal is considered complete until this procedure has been carried out.

Invalidation of Credits

Courses completed at Bethany or elsewhere more than 10 calendar years before the date of proposed graduation are not accepted for credit toward graduation. All candidates are expected to comply with degree requirements in effect at the time of acceptance of the degree application. With the approval of the Academic Appeals Committee and the payment of the required fee, the candidate may take examinations, as administered by the various departments, for courses included in the current curriculum, to reinstate academic credit that may have been declared invalid because of date.

Academic Appeals Committee

The Academic Appeals Committee is composed of members of the Bethany faculty charged with the responsibility of developing policies and procedures for the equitable and efficient administration of the academic machinery in such areas as attendance, the grading system, and academic standards. The Committee reviews students' academic records to apply College policies on such matters as academic standing, probation, eligibility, and dismissal. It evaluates and acts on student appeals for exemptions from established policies.

Changes in Regulations

Bethany reserves the right to amend the regulations covering the granting of degrees, the courses of study, and the conduct of students. Membership in Bethany College and the receiving of its degrees are privileges, not rights. The College reserves the right (and the student concedes to the College the right) to require the withdrawal of any student at any time.



Course Descriptions

Biology

Aims

To acquaint students with the living world around them and with basic life processes; to demonstrate the scientific method as an approach to problem solving; to cultivate an appreciation of research; to develop laboratory skill in various types of work in biology; to prepare students as teachers of biology and for professional fields such as medicine, dentistry, veterinary medicine, and for graduate schools in various biological disciplines; and to help students find and appreciate their role in the natural environment.

Requirements for Field of Concentration

Biology majors must complete the General Biology Track or the Biochemistry Track. A minimum of 48 semester hours in the department including the senior project is required. All biology majors must complete a minimum of 16 semester hours in chemistry, including two semesters of organic chemistry and eight hours of physics. German or French is recommended for those students preparing for graduate school. A semester of calculus is also strongly recommended. Statistics is recommended for students preparing for graduate work in ecology, wildlife biology, genetics, and certain other fields. Students with a special interest in botany should elect Bio. 338 instead of four hours from Bio. 440 and Bio. 442, and take Bio. 102 and Bio. 228.

The General Biology Track

Biology majors in the general biology track must complete Bio. 100, Bio. 110, Bio. 180, Bio. 290, Bio. 308, Bio. 326, Bio. 378, and Bio. 477. They must also choose four semester hours from Bio. 343, Bio. 425, and Bio. 467, and four semester hours from Bio. 440 and Bio. 442, or Bio. 338.

The Biochemistry Track

Biology majors in the biochemistry track must complete Bio. 100, Bio. 110, Bio. 180, Bio. 290, Bio. 308, Bio. 314, Bio. 320, Bio. 343, Bio. 378, Bio. 467, and Bio. 477. They should also complete eight semester hours of calculus.

Only Biology majors who have completed the following courses will be recommended for state certification to teach biology in the secondary schools: Bio. 100, 167 or 308, 110, 180, 290, 326 or 228 and 231, 343, 480; Chem. 101, 102.

See Education Department listings for required courses in professional education.

Bio. 100 Modern Concepts in Life Science

4 hours

An introduction to modern concepts of cell biology, metabolism, photosynthesis, nutrition, reproduction, heredity, evolution, behavior, and ecology, emphasizing the process of acquiring biological knowledge. Consideration is given to social and ethical implications of biological issues.

- Bio. 102 Horticultural Science** **2 hours**
An examination of the scientific concepts on which horticulture is based. Emphasis is placed on the study of the plant, the basis of all horticultural activities.
- Bio. 105 First Aid as Related to the Principles of Biology** **2 hours**
A major emphasis is placed on the biological principles utilized in the standard first aid and personal safety course of the American Red Cross. Red Cross certificates may be earned by those passing the examination. Opportunity for instructor's certificates will be presented as an option at the end of the course. (May be taken for credit as Physical Education 226.)
- Bio. 110 Plants, People, and Environment** **4 hours**
A study of plant life including the evolution of the various groups of plants, an introduction to the morphology and anatomy of vascular plants, plant genetics and the functional life processes of plants. Some of the economic and ecological problems such as world food supply and effects of pollution on plants will also be examined.
- Bio. 167 Introduction to Mammalian Anatomy and Physiology** **4 hours**
A study of mammalian anatomy as exemplified in the cat. Discussion and study of the functioning of the tissues and organ systems of the human body; lab study of the anatomy of the cat; human physiology. (Not open to biology majors. May be taken for credit as Physical Education 167.) *Prerequisite: Bio. 100.*
- Bio. 180 Invertebrate Zoology** **4 hours**
A structural, functional, and evolutionary study of the major invertebrate phyla.
- Bio. 205 Emergency Medical Training** **4 hours**
The medical, communication, transportation records, and report instructions required for certification by the West Virginia Department of Health as an emergency medical technician. (Red Cross advanced first aid certificate may be earned by those passing the examination.)
- Bio. 210 Evolution** **2 hours**
An examination of the evidence for the theories of evolution with special attention to the modern synthesis of genetic and ecological factors. *Prerequisite: An elementary course in biology or permission of the instructor.*
- Bio. 228 Field Botany** **2 hours**
An introduction to the taxonomy of vascular plants with emphasis on the local flora, including the techniques of herbarium science.
- Bio. 231 Ornithology** **2 hours**
The anatomy, behavior, and identification of birds.
- Bio. 250 Biological Rhythms** **2 hours**
Circadian and other rhythms are studied in living organisms including humans. An emphasis is placed on the physiological and behavioral aspects of rhythms.
- Bio. 251 Endocrinology** **2 hours**
A study of various endocrine glands and their hormonal regulation of diverse physiological functions in health and disease.
- Bio. 290 General Genetics** **4 hours**
A synthesis of basic principles and modern molecular theory.
- Bio. 308 Comparative Vertebrate Anatomy** **4 hours**
Comparative anatomy of the representative forms of vertebrates: lab study of the comparative anatomy of the shark, other lower vertebrates, and the cat.
- Bio. 314 Introduction to Biochemistry** **4 hours**
(See Chemistry 314.)
- Bio. 320 Physical Chemistry for the Life Sciences** **2 hours**
An introduction to the nature of thermodynamics including equilibrium processes. Applications of physical concepts to systems of biological interest are emphasized. A study of the rate processes in the liquid phase is included. (May be taken for credit as Chem. 320) *Prerequisite: Chem. 102.*

- Bio. 326 Ecology** **4 hours**
A study of the general principles of ecology of microorganisms, plants, and animals. Special emphasis is placed on field study of several communities. *Prerequisites: Bio. 100 and Bio. 110 or permission of the instructor.*
- Bio. 338 Plant Anatomy and Physiology** **4 hours**
The morphology and anatomy of the vascular plants together with a study of the fundamental life processes of plants: growth, reproduction, irritability, metabolism, and hormonal control.
- Bio. 343 Microbiology** **4 hours**
The morphology and physiology of microorganisms: principles of lab technique: and cultural characteristics and environment influences on microbial growth.
- Bio. 378 Junior Seminar** **2 hours**
The theory and practice of selected methods in biological instrumentation and research. Special emphasis is placed on those methods not covered in other courses and on methods helpful for the completion of Senior Projects.
- Bio. 425 Animal Physiology** **4 hours**
A study of the structure and functions of the human body: the mechanism of bodily movements, responses, reactions, and various physiological states.
- Bio. 440 Histology-Microtechniques** **4 hours**
A study of the structure of the cell, its modification into various tissues, and the practice of general histological techniques.
- Bio. 442 Embryology** **4 hours**
A study of the ontogenetic development of selected embryos. Major emphasis is on the vertebrates.
- Bio. 467 Cell Physiology** **4 hours**
An introduction to the structural organization of cells and the important aspects of cell physiology in the light of modern biochemistry and biophysics. *Prerequisites: Chem. 211-212 or permission of the instructor.*
- Bio. 477 Senior Seminar** **2 hours**
An introduction to the literature of the biological sciences, both research papers and review articles, and the basics of scientific writing. The emphasis is on skills useful to the student who is in the process of finishing the written portion of the senior project. When possible, the student will make an oral presentation of the senior project and complete a paper or review article for publication as part of the seminar.
- Bio. 480 Methods and Materials in Teaching Physical and Life Sciences** **4 hours**
A study of the aims and methods of teaching the life sciences in the secondary schools. Special attention is given to teaching general laboratory procedures and to techniques of teaching. *Prerequisite: 16 hours in biology or permission of the instructor.*
- Bio. 487-488 Independent Study** **2 or 4 hours**
- Bio. 490 Senior Project** **2-8 hours**
Starts the first semester of the junior year and is to be completed in the spring semester of the senior year.

Chemistry

Aims

To contribute to the student's general knowledge and understanding of the nature of the physical world and his or her understanding of the place of chemistry in industrial

and business life; to provide experience in the scientific method of reasoning; and to provide students concentrating in this field with a thorough and practical education in chemistry which may be useful in industrial, technical, and graduate work.

Requirements for Field of Concentration

Every student majoring in Chemistry is required to complete the following core courses: Chem. 101, 102, 211, 212, 324, 325, 490; Phys. 201, 202; Math. 201, 202. In addition, every student must complete either the Professional Chemistry Track or the Biochemistry Track. The program of study is consistent with the most recent standards of the American Chemical Society.

Entering freshmen interested in chemistry should select Chemistry 101 and mathematics at the appropriate level. Programs for subsequent semesters must be decided in conference with the faculty advisors for chemistry. Students with Advanced Placement (AP) in chemistry from high school should consult immediately with a faculty member in Chemistry for placement in a course at the appropriate level.

The Professional Chemistry Track

Chemistry majors in the Professional Chemistry Track must complete Chem. 320 or 322, 326, 404, four hours of electives in Chemistry; two hours selected from the following: C.S. 140, 142; Phys. 221, 222, 300; Math. 203, 341. Additional advanced courses in Mathematics are recommended.

The Biochemistry Track

Chemistry majors in the Biochemistry Track must complete Chem. 314, 320 or 322, 467; Bio. 290, 343. At least eight hours from the following courses are recommended: Bio. 100, 308, 338, 440, 442; C. S. 140 or 142; Math. 281.

Students who plan to do graduate work in chemistry should develop a reading knowledge of chemical German, French, or Russian. Additional courses in mathematics are also strongly recommended. All courses in chemistry as well as the indicated courses in mathematics and physics must be taken for a letter grade.

Only students who have completed the following courses or their equivalents will be recommended for state certification to teach Chemistry in secondary school: Chem. 101, 102, 211, 212, 314, 320 or 322, Physics 201, 202, G.S. 480, and six hours selected from Chem. 324, 325, 326, 404, and 414. See Education Department listings for required courses in Professional Education.

Chem. 100 Consumer Chemistry

4 hours

A course emphasizing an understanding of chemical concepts relevant to our everyday lives. Students completing the course should be able to analyze and discuss magazine and newspaper articles dealing with the subjects related to chemistry. *This course is designed for non-science students.* (May be taken for credit as G.S. 100.)

Chem. 101 General Chemistry I

4 hours

A study of theoretical and descriptive inorganic chemistry. The laboratories provide students with experience in basic laboratory manipulations, problem solving and testing of hypotheses. Three lectures and three hours of lab per week. *Prerequisites: Two units of high school algebra or concurrent enrollment in Math. 103.*

Chem. 102 General Chemistry II

4 hours

A continuation of the lecture portion of Chem. 101. Study of solubility and acid-base phenomena in aqueous systems with appropriate lab work. *Prerequisite: Chem. 101.*

Chem. 211-212 Organic Chemistry

4 hours each

An introduction to the study of the organic compounds of carbon, both aliphatic and aromatic, involving a considerable amount of the electronic mechanisms of organic reactions. Lab work consists largely of organic preparations. (Three lectures and three hours of lab per week.) *Prerequisites: Chem. 101, 102.*

Chem. 311 Bonding and Symmetry in Organic Chemistry 2 hours

An introduction to group theory and simple molecular orbital calculations as they apply to organic chemistry and to the spectra of organic compounds. Emphasis is placed on problem solving and structural determinations from spectroscopic data. *Prerequisite: Chem. 322 or permission of the instructor.*

Chem. 314 Biochemistry 4 hours

The chemistry of fundamental biological reactions with an emphasis on structure-function relationships, metabolic pathways, and the regulation of biochemical processes. The laboratory provides an introduction to the modern experimental techniques of biochemistry. *Prerequisite: Chem. 212.* (May be taken for credit as Bio. 314.)

Chem. 320 Physical Chemistry for the Life Sciences 4 hours

An introduction to the nature of thermodynamics including equilibrium processes. Applications of physical concepts to systems of biological interest are emphasized. A study of the rate processes in the liquid phase is included. (May be taken for credit as Bio. 320.) *Prerequisite: Chem. 102 and Math 202 or permission of the instructor.*

Chem. 322 Physical Chemistry I 4 hours

An introduction to the concepts of classical thermodynamics with special emphasis on the concepts of enthalpy, entropy, and free energy. A study in chemical kinetics, especially in the liquid phase. *Prerequisite: Chem. 102, Math. 202.*

Chem. 324 Analytical Chemistry 4 hours

The study of principles of acid-base, oxidation-reduction, and solubility phenomena associated with solutions. Classical and modern applications of these principles to the analysis of unknowns will be performed in the laboratory. *Prerequisite: Chem. 102.*

Chem. 325 Chemical Instrumentation 2 hours

The theory and practice of selected methods in chemical instrumentation. Special emphasis will be placed on those methods not covered in other courses and on methods helpful for completion of Senior Projects.

Chem. 326 Physical Chemistry II 4 hours

A study in the different energy states of atoms and molecules, statistical principles governing the distribution of particles within these states, and the transitions between states. Introduction to transport processes, and surface and interface problems. *Prerequisite: Chem. 102, Math. 202.*

Chem. 404 Advanced Inorganic Chemistry 4 hours

A systematic discussion of the important phenomena of modern inorganic chemistry to include bonding and structure, kinetics, thermodynamics, acid-base theories and physical methods. Transition metal and organometallic chemistry are examined along with the chemistry of selected representative elements. (Three lectures and three hours of lab per week.) *Prerequisites: Chem. 326.*

Chem. 411 Physical Organic Chemistry 2 hours

A study of the theories and techniques relating structure and properties of organic compounds. *Prerequisites: Chem. 212; Chem. 322 or permission of the instructor.*

Chem. 414 Advanced Organic Chemistry 2 hours

A study of selected advanced topics in organic chemistry including reaction mechanisms. Lab is introduced, where appropriate, and stresses the use of instrumentation. *Prerequisites: Chem. 212; Chem. 322 or permission of the instructor.*

Chem. 430-434 Special Topics 2 hours each

A series of courses devoted to the consideration of advanced topics and areas of special interest in the fields of Analytical Chemistry (430), Inorganic Chemistry (431) Organic Chemistry (432), Physical Chemistry (433), and Biochemistry (434). *Prerequisite: Permission of the instructor.*

Chem. 467 Cell Physiology 4 hours

An introduction to the structural organization of cells and the important aspects of cell physiology in the light of modern biochemistry and biophysics. *Prerequisites: Chem. 211-212 or permission of the instructor.*

- Chem. 475 Polymer Science** **4 hours**
A study of the methods of synthesizing, isolating, and characterizing polymers. The course includes the study of organic, inorganic, and biological polymers. Laboratory will involve the characterization of electrical, optical, thermal, molecular, and mechanical properties. *Prerequisites: Chem. 212, Chem. 320 or 322, or permission of the instructor.*
- Chem. 477-478 Seminar in Chemistry** **2 hours**
Presentation of current research topics by students, faculty, and visiting lecturers.
- Chem. 480 Methods and Materials in Teaching Physical & Life Sciences** **4 hours**
A study of the aims and methods of teaching the physical and life sciences in the secondary schools. Special attention is given to teaching general laboratory procedures and techniques of teaching. Each of the departments in the physical and life sciences participates in the program. (May be taken for credit as Education 480.) *Prerequisite: 16 hours in one of the physical or life sciences or permission of the instructor.*
- Chem. 487-488 Independent Study** **2 or 4 hours**
- Chem. 490 Senior Project** **2-8 hours**
During the junior year the chemistry major is introduced to the methods of employing the chemical literature, selects a topic for advanced investigation, and makes a literature search of background material as a basis for an in-depth study in this area. There is one class meeting each week for both semesters. Following this preliminary work, an investigation of a significant topic in chemistry is made by each senior under the direction of a faculty member in the department. This work culminates in a written and oral report at the end of the senior year. *Fee. \$20.*

Communications

Aims

To prepare students to work in the media or with the media by studying the fields of broadcasting, advertising, public relations, or print media; to prepare students to enter the professional world of communications through courses emphasizing communication skills and others focusing on the structure of the media and their effects and impacts on individuals, groups, and cultures; to instill a sense of ethical and legal responsibility among future professional communicators.

Other students use the general communications curriculum to prepare for law, teaching, business management, and other closely related fields.

Requirements for Field of Concentration

Communications 101, 201, 206, 304, 403, 420; either 204 and 303, or 261, 271, 310; either 401 or 402; either 301 or 302.

In addition, students will complete a Senior Project, take 12 hours in English courses and/or foreign language literature courses, take Philosophy 124, and achieve a proficiency in a foreign language at the 230 level.

Normally students are expected to complete the required communications courses in the following order: freshman year — 101, 206; sophomore year — 201, 204 or 261-271, 301 or 302; junior year — 303 or 310, 304, 401 or 402; senior year — 403, 420, 490.

Appropriate courses outside the department, including Core Programs, can be recommended by advisors in the Communications Department.

It is recommended that a student in the department complete one of the following voluntary tracks: Print Media — 204, 295, 303, 306; Public Relations — 302, 320, 325, 405; Advertising — 301, at least 8 hours from 383, 384, 385, 404, 406; Broadcasting — 261, 271, 310, 311, at least 2 hours from 272, 361, 371. Advisors in the department can recommend for each track 4-6 hours of additional specialized Communications electives, generally taken in the junior and senior years.

Students must have achieved at least sophomore standing for enrollment in any of the 300- and 400-level courses in the department.

Comm. 101 Introduction to Mass Communications 4 hours

The history and theory of mass communications, the newspapers, magazines, radio, television, books, movies, and adjunct agencies in modern society, and their effects on audiences.

Comm. 201 News Gathering and Writing 4 hours

The study and practice of basic print and electronic news gathering and news writing, and writing skills, including grammar, as they relate to various subject fields. *Prerequisite: Facility in using Macintosh computers. (Details available from the Department of Communications.)*

Comm. 204 Copy Editing and Layout 4 hours

The principles and practice in editing copy for publications; includes typography, layout, design of letterpress and offset newspapers, and use of computers. *Prerequisite: Comm. 201.*

Comm. 206 Interpersonal Communication: Public Speaking 4 hours

An introduction to the dynamics of communication: levels of interaction between speaker and listener. Developing the use of voice and non-verbal signals; understanding oral style in language and logical argument in public speaking. Focus on the design and delivery of short speeches and on critical listening. (May be taken for credit as Fine and Applied Arts 206.)

Comm. 261 Radio Production and Performance 2 hours

A study of the basic audio production and performance techniques for radio. Laboratory experience in the WVBC radio studios.

Comm. 271 Basic Television Production and Performance 2 hours

Lecture and laboratory experiences in field camera and audio, videotape editing, and performance. Introduction to lighting, studio operations, special effects, and TV graphics. *Prerequisite: Comm. 261.*

Comm. 272 Intermediate Television Production and Performance 2 hours

Lecture and laboratory experience in studio production and direction, studio lighting, advanced videotape editing, and script writing. Development of leadership skills in TV production. *Prerequisite: Comm. 271.*

Comm. 295 Publication Photography 4 hours

An introduction to the knowledge, skills, and techniques needed to produce quality black-and-white photographs for publication. Course covers both visual communication techniques and basic design and aesthetic concepts. Emphasis is on learning to meet specific news and other publications' photographic requirements effectively. (Two lectures and one four-hour lab per week.) *Prerequisites: Comm. 201 and junior standing.*

Comm. 301 Principles of Advertising 4 hours

A study of history, philosophies, and principles of advertising, including a study of media markets and merchandising. Role and evaluation of advertising. Stress on copy writing and layout.

Comm. 302 Principles of Public Relations 4 hours

A study of public relations as a process involving research, planning, communication, and evaluation. Analyzing publics and influencing their opinions. History, contributions, effects, laws, and ethics of the field. Development of a public relations plan for an organization.

Comm. 303 Principles of Media Management 4 hours

This course emphasizes management issues in mass communications organizations. Subjects covered include what media companies do, the key functions of media leaders and managers, the areas of management within media organizations, and the management perspective on legal issues and issues of social responsibility.

- Comm. 304 Law of Mass Communications** **4 hours**
A study of the legal rights and limitations of the mass communications media in the United States.
- Comm. 306 Magazine Article Writing** **2 hours**
The role and contributions of U.S. magazines, historically and currently. Trends in writing style, editing, production, layout, advertising, promotion, reader research, and circulation. Practice in writing three articles for a professional journal and general circulation magazines.
- Comm. 309 Advanced Reporting** **2 hours**
A continuation of and building on the skills introduced in Beginning Reporting. Emphasis on reporting techniques, development and use of news sources, and writing of various types of stories. *Prerequisite: Comm. 201.*
- Comm. 310 Advanced Broadcast News Reporting** **2 hours**
A lecture-laboratory course dealing with the complexities of the electronic news gathering process. Emphasis on the use of state-of-the-art technology and its effects on news content and story organization. Field trips to local stations and guest speakers from the media. Students are required to gather and report news using the technology associated with radio, television, and cable. *Prerequisites: Comm. 201, 271.*
- Comm. 320 Public Relations Writing** **2 hours**
The practice of styles of writing used in public relations, including publicity, publications copy, scripting for audio and audio/video productions, and public relations advertising. *Prerequisite: Comm. 302.*
- Comm. 325 Public Relations Case Problems** **2 hours**
The application of the principles of public relations to actual and hypothetical cases. Consideration of practical, ethical, and legal implications of decisions made while managing public relations operations. *Prerequisite: Comm. 302.*
- Comm. 340-345 Special Topics in Mass Communications** **2 or 4 hours**
- Comm. 350 Persuasion** **4 hours**
A concentrated study of persuasion theory. Topics include learning theory, consistency theories, social judgment theory, motivation, the enthymeme, counterattitudinal advocacy, role-playing, and inducing resistance to persuasion. *Prerequisite: Comm. 206.*
- Comm. 355 Advanced Public Speaking** **4 hours**
The course focuses on specific types of speeches and rhetorical situations. Special emphasis is given to speechwriting and to the actual delivery settings for these speeches. Speeches include introduction, nomination and acceptance, eulogy, after-dinner, impromptu, question response, sales presentation, reports, etc. *Prerequisite: Comm. 206.*
- Comm. 361 Advanced Radio Production and Performance** **2 hours**
The study of advanced production and performance techniques for the radio broadcaster. Laboratory experiences in the WVBC radio studios. *Prerequisite: Comm. 261.*
- Comm. 371 Advanced Television Production and Performance** **2 hours**
The study of the integration of the technical and creative skills necessary for broadcast television production, both in studio and on location. Definition of creativity and its role in broadcast television. *Prerequisite: Comm. 272.*
- Comm. 383 Advertising Creativity** **4 hours**
The principles and practices of creating advertising for the print and electronic media. *Prerequisite: Comm. 301.*
- Comm. 384 Advertising Media Buying** **2 hours**
The study of the process of developing an advertising media plan. Extensive analysis and use of audience and marketing data for the print and broadcast media. *Prerequisite: Comm. 301*
- Comm. 385 Advertising Media Selling** **2 hours**
An examination of the theory and techniques of selling print and broadcast media to advertisers, including salesmanship and presentation. *Prerequisite: Comm. 301.*

Comm. 390	Campus Media Management	1 hour
The student, working as a manager for a campus media organization, will develop leadership skills under the supervision of the medium's faculty advisor. Open only to managers of the campus media as determined by faculty advisors. May be repeated once in the same organization. Maximum of four credits total. (Letter grades for Communications majors; CR/NCR for others.)		
Comm. 401	History of American Mass Communications	4 hours
The history of newspapers, magazines, books, radio, and television as well as the related areas of public relations and advertising in the United States.		
Comm. 402	Public Opinion	4 hours
The nature and significance of public opinion. Includes studies of public opinion formation and measurement, the roles of news media, advertising, censorship, propaganda, political indoctrination, and other factors. Class assignments include surveys.		
Comm. 403	International Communications	2 hours
A comparative study of media systems: theory and practices in print and electronic media, advertising, public relations and journalism education in Europe, Asia, Latin America, the Middle East, and Africa.		
Comm. 404	Direct Response Advertising	2 hours
A study of theory and techniques of direct response advertising and promotion. Preparation of an original project and/or service to a profit or non-profit institution. <i>Prerequisite: Comm. 301.</i>		
Comm. 405	Public Relations Campaigns	2 hours
The handling of an organization's public relations program or an organization's special public relations campaign, including researching and analyzing the public relations situation, planning the program or campaign, and developing the various communications tools to be utilized. A competitive public relations agency model is used. <i>Prerequisite: Comm. 320 or 325.</i>		
Comm. 406-407	Advertising Campaigns	2 hours
The development of an advertising campaign including situation analysis, strategic advertising plan and some execution of specific creative and media tactics. A competitive agency model is used. <i>Prerequisite: Comm. 301, 383, or 384.</i>		
Comm. 420	Professional Internship	2 hours
Professionally supervised experience with an off-campus media organization or a communications agency. Assignments will allow for application of classroom materials and campus media experiences and will be similar to those experienced by new communications professionals. (Minimum of 160 hours required. Generally taken as a senior.) <i>Prerequisites: Two on-campus media experiences and a professional observation.</i> (Details about prerequisites available from the Department of Communications.)		
Comm. 487-488	Independent Study	2 or 4 hours
Comm. 490	Senior Project	2-8 hours

Computer Science

Aims

To help students focus on programming as a discipline and the computer as a tool for solving problems. Students are prepared to recognize problems that can be solved with the aid of computers, to solve such problems individually and as a member of a team, and to develop their solutions through well-organized and well-documented structured programs which run efficiently. Students are also introduced to contemporary issues in the discipline and encouraged to assess how computer science relates to future employment or future formal education.

Two Plans of Concentration

Two plans of concentration are offered — one leading to the Bachelor of Arts degree and the other to the Bachelor of Science degree.

The Bachelor of Arts plan is designed for those students seeking a career in computer science in a business environment.

The Bachelor of Science plan is designed for students seeking a career in computer science in a scientific lab or in a software development firm.

Requirements for the Bachelor of Arts Degree

The Bachelor of Arts degree requires Computer Science 144, 201, 202, 290, 370, 380, 478, 490; Mathematics 201, 281; Accounting 211, 212, 220; Economics and Business 312; English 209. Strongly recommended are Computer Science 280; Economics and Business 200, 280; Accounting 425. Other recommended courses include Communications 206, 301, 302; General Science 210; Philosophy 124. Beginning students are expected to complete Computer Science 201 and Mathematics 201 during the first semester.

Requirements for the Bachelor of Science Degree

The Bachelor of Science degree requires Computer Science 201, 202, 280, 290, 330, 370, 380, 478, 490; Mathematics 201, 202, 354, 383; Physics 201, 202. Beginning students are expected to complete Computer Science 201 and Mathematics 201 during the first semester.

CS 140-150 Introduction to Programming **2-4 hours each**

The following courses provide an introduction to computers by programming in a high level language on the Prime computer. The emphasis is programming real-life problems using efficient coding techniques. These courses are directed towards the student who wants to use the computer as a problem-solving tool.

CS 140 Introduction to Programming Using BASIC **2 hours**

This course is directed toward the non-science student. Not recommended for students who have successfully completed any other computer language course.

CS 142 Introduction to Programming Using FORTRAN **2 hours**

The programming assignments in this course will involve applications to science problems.

CS 143 Introduction to Programming Using PL 1 **4 hours**

The programming assignments in this course will involve applications to science problems.

CS 144 Introduction to Programming Using COBOL **4 hours**

The programming assignments in this course will involve applications to business problems.

CS 145 Introduction to Programming Using RPG II **2 hours**

The programming assignments in this course will involve applications to business problems.

CS 150 Programming for Science Applications **4 hours**

This course will teach methods of structured programming and will use both FORTRAN 77 and PASCAL as computer languages. All programming will involve scientific applications.

Prerequisite: Permission of instructor.

CS 200 Computer Applications in the Social Sciences **2 hours**

A study of computer techniques applied to social and behavioral sciences. Topics include language selections, matrix manipulation, statistics (basic), analysis of variance, correlations and regression, econometrics, and profit analysis packages.

- CS 201 Computer Science I** **4 hours**
This beginning course for computer science majors may also be taken by others who wish to learn PASCAL. The emphasis is on techniques of algorithm development, structured programming and debugging techniques as they apply to the PASCAL language.
- CS 202 Computer Science II** **4 hours**
An introduction to operating systems, data structures and computer organization and files. The data base management system INFO by Henco will also be discussed. The programming assignments will provide the students with advanced features of PASCAL and an introduction to PL 1, another structured language. *Prerequisite: CS 150 or CS 201.*
- CS 222 Digital Electronics** **4 hours**
An introduction to digital electronics with applications in instrumentation and computer electronics. Topics include Boolean Algebra, basic gates, logic families, encoders-decoders, astable/monostable multivibrators, flip-flops, counters, readouts, shift registers, bi-directional bus structure, serial-parallel/parallel-serial data conversion, D to A and A to D conversion. (Three hours of lecture and two hours of lab each week. May be taken for credit as Physics 222.) *Prerequisite: Math. 103 or equivalent or permission of the head of the department.*
- CS 280 Assembly Language** **4 hours**
A study of Assembly language programming methods. Topics include computer organization, Assembly process, Assembly coding, addressing, binary arithmetic, storage allocation, character and bit manipulation, and debugging techniques. *Prerequisite: CS 202.*
- CS 290 Data Structures** **4 hours**
A study of basic concepts and their representation, including linear lists, strings and string processing, algorithms, and arrays, storage allocation and representation of arrays, storage systems and structure, and storage allocation and collection. *Prerequisite: CS 202.*
- CS 310 Discrete Structures** **4 hours**
Fundamental algebraic, logical, and combinational concepts of computer science. Topics include graph theory, monoeds and finite automata, lattices, and Boolean algebras.
- CS 330 Computer Organization** **4 hours**
The application of Boolean algebra to combinational circuit design problems, organization of simplified computer components, adders, arithmetic and logical units, memory organization, architecture, and physical realization of computer systems. *Prerequisite: CS 202.*
- CS 370 Operating Systems** **4 hours**
The study of batch processing systems, implementation techniques for parallel processing of input/output and interrupt handling, memory management, system accounting, interprocess communication and interfaces, and deadlocks. *Prerequisite: CS 280.*
- CS 380 Introduction to Data Base Design** **4 hours**
This course presents an in-depth study of the design and the implementation of a data base. Topics include architecture of a data base, the three approaches (relational, network, and hierarchical) to a data base. Also included is some experience with INFO, a relational data base package by Henco. *Prerequisite: CS 290.*
- CS 390 Numerical Analysis** **4 hours**
The study of numerical methods of evaluating integrals and differential equations. Techniques in finding the roots of polynomials and solving systems of linear equations and matrix manipulation. (May be taken for credit as Math. 390.) *Prerequisites: CS 142, 143, or 201 and Math. 201, 202.*
- CS 400 Interactive Computer Graphics** **4 hours**
A study of graphics on the microcomputer using Turtle Graphics and the UCSD PASCAL. *Prerequisite: One high level language other than BASIC.*
- CS 410 Computer Simulation** **2 hours**
An examination of simulation methodology including generation of random numbers and variates, analysis of data generated by simulation experiments, and validation of simulation models. Introduction to queuing theory. Selected simulation applications. *Prerequisite: Math. 383.*

- CS 450 Data Base Concepts** **2 hours**
 An introduction to the concept of a data base. Topics include data organization and structure data security. Also discussed will be a comparison of data base approaches and access methods. Some programming assignments will be given in INFO, the data base management system on our PRIME. *Prerequisite: CS 202.*
- CS 460 Programming Language Structures** **4 hours**
 A study of programming language constructs emphasizing the run-time behavior of programs. Topics include: formal grammars, parsing, information binding, data storage, global and local variables and parameters, string handling and list processing. *Prerequisite: CS 202.*
- CS 478 Senior Seminar** **2 hours**
 The study of topics in computer science.
- CS 482 Computers in Education** **2 hours**
 A study of microcomputers and software available for classroom use. Methods for evaluating software will be discussed. Students will design classroom applications using LOGO or some other software package. *Prerequisite: Permission of Instructor.*
- CS 487-488 Independent Study** **2 or 4 hours**
- CS 490 Senior Project** **2-8 hours**

Developmental Studies

Developmental Studies is a grouping of courses designed to provide academic assistance during the freshman year to students who need it. Each course is graded on a credit/no credit basis. Students who complete one of these courses successfully receive 2 credit-hours toward graduation.

Students may take as many of the courses as needed, but of the 128 semester hours credit required for a Bethany College degree, no more than 4 credit-hours may be earned in Developmental Studies courses.

Dev. Stu. 100 Reading **2 hours**
 A course providing basic instruction in reading and comprehension skills. Emphasis is placed upon the specific areas of word recognition, vocabulary, and comprehension. The Special Advising Program section will use the Strategies Intervention Model and Learning Strategies Curriculum. (CR/NCR only.) *Permission of the instructor.*

Dev. Stu. 105 Mathematics **2 hours**
 A course providing developmental mathematics instruction for the college student who wishes to improve his or her abilities in mathematics. Emphasis is placed upon conceptual understanding of basic mathematics with corresponding computational skill development. (CR/NCR only.)

Dev. Stu. 110 Writing **2 hours**
 A course providing instruction and practice in basic composition for freshmen. Emphasis will be placed on organization, mechanics, and clarity. The Special Advising Program will use the Strategies Intervention Model and the Learning Strategies Curriculum. (CR/NCR only.) *Permission of the instructor.*

Dev. Stu. 115 Strategies for College Success **2 hours**
 A course providing general skills for success on the college level. Emphasis is placed on both the attitudes and behaviors which enable students to be successful on the college level. Topics covered include goal setting, taking responsibility for your own success, effective communication, healthy lifestyle, time management, test-taking, increasing memory, note-taking, and textbook reading. (CR/NCR only.) Course begins one week prior to the official first day of classes. Additional fee required.

Economics & Business

Aims

The Department of Economics and Business offers two majors: Economics & Business and Accounting. Both majors are based in the liberal arts and emphasize the application of techniques drawn from economics and mathematics to business problem solving. The department’s courses cultivate the ability to apply knowledge and to develop proficiency in the use of analytical tools for decision making in business, government, and society. The majors and courses serve as preparation for work in business, government, law, public service, and graduate study.

Requirements for Field of Concentration

All majors in the department are required to complete the following courses: Econ. 200, 301, 302; Acct. 211, 212, 220; and Mathematics 201, 281, 282. Students considering majoring in the department should complete all of the 200-number courses listed above by the end of their sophomore year.

In addition to the courses required of all departmental majors, students majoring in Economics and Business are required to complete Econ. 280, 290, 312, 477 and a Senior Project in Economics and Business. Students with a major in Economics and Business are limited to 12 hours in Accounting beyond the required courses (Acct. 211, 212, and 220).

In addition to the courses required of all departmental majors, students majoring in Accounting are required to complete Acct. 312, 313, 314, 425, 435, 378, and a Senior Project in Accounting. Students with a major in Accounting are limited to 12 hours in Economics and Business beyond the required courses (Econ. 200, 301, and 302).

Students majoring in the Department of Economics and Business are expected to attain a minimum grade of “C” in all required courses in the program. If a student receives a grade lower than a “C”, the student must arrange an interview with the head of the department prior to taking additional upper-level courses.

Economics & Business

Econ. 101 Personal Finance **4 hours**

This course aims to develop an understanding of the concepts needed for intelligent consumer decision-making. The course covers budget policies, borrowing, installment buying, marketing techniques, and consumer purchases in the areas of food, clothing, automobiles, housing, social insurance, personal insurance, pension programs, investment markets, and estate building. *(Not recommended for students with a major in the Department of Economics and Business. Offered every third year.)*

Econ. 103-104 Students in Free Enterprise **1 hour**

An activity course for students participating in the Bethany chapter of Students in Free Enterprise (SIFE). SIFE participants engage in a variety of programs designed to increase public awareness of economic issues. Selected students from the organization participate in regional competition. (Activity course: CR/NCR only.)

Econ. 111 Introduction to Economics and Business **2 hours**

An introduction to the department’s programs. The course will explore the development of economic analysis, the institutions of capitalism and their relationships to other social institutions, and the structure, procedures, and objectives of the contemporary American business community. *Recommended for all first semester students in the department. Not recommended for students who have previously taken other courses in the department.*

- Econ. 200 Principles of Economics** **4 hours**
 An examination of the fundamental concepts, principles, and problems of modern economics. Alternative methods of settling economic questions will be explored with special emphasis on the functioning of the market system. Topics covered will include the institutions of capitalism, basic economic laws, rationing problems, income distribution, business structures, the labor movement, the role of government, national income accounting, business cycles, banking and monetary policy, Keynesian analysis and fiscal policy, and concepts of international trade.
- Econ. 280 Managerial Economics** **4 hours**
 A study of profit-maximizing managerial decision-making with emphasis on the external environment of the firm. The course will introduce students to quantitative techniques of decision-making. *Prerequisite: Econ. 200*
- Econ. 287 Organizations and Human Behavior** **4 hours**
 Organizations and Human Behavior seeks to improve the effectiveness of organizations by strengthening human processes. The course explores specific aspects of organization culture such as motivation, conflict, power, and leadership. Exercises and simulations are emphasized. (May be taken for credit as Psychology 287.)
- Econ. 290 Principles of Marketing** **4 hours**
 An introduction to fundamental concepts that will help improve marketing decision making. The student will be introduced to the language of marketing, as well as the concepts of marketing strategies, and pricing. *Prerequisite: Econ. 200.*
- Econ. 300 Business and Society** **4 hours**
 An exploration of the interface of business with government and society. The course explores management action in situations involving significant political and social factors. *Prerequisite: Econ. 200. Open only to juniors and seniors.*
- Econ. 301 Intermediate Price Theory** **4 hours**
 An intermediate level study of resource allocation, price determination, output determination, and income distribution at the micro level under various market conditions. Mathematical analysis and model building will be used whenever appropriate. *Prerequisites: Econ. 200, Math. 201, 281.*
- Econ. 302 Intermediate Macroeconomic Theory** **4 hours**
 A study of the determinants and the behavior of the national economy, including consideration of production, employment, and price levels. Mathematical analysis and model building will be used whenever appropriate. *Prerequisite: Econ. 200.*
- Econ. 312 Managerial Finance** **4 hours**
 An exploration of corporate organizations and the planning of financial requirements. The course includes an intensive study of cash flow, budgeting, capital decisions, internal financing, and corporate reorganization. *Prerequisites: Acct. 211, 212, and 220.* (May be taken for credit as Acct. 312.)
- Econ. 316 Money, Banking, and Fiscal Policy** **4 hours**
 A study of the behavior of various money markets and the operation of commercial banks, the Federal Reserve System, and the Treasury Department, including an analysis of tax revenues, expenditures, and debt-financing. *Prerequisite: Acct. 212.* (Offered alternate years.)
- Econ. 325 Investment Management** **4 hours**
 A critical study of the various types of investment instruments and the relative merits of each. In addition, the course explores investment procedures, security analysis, security rating, portfolio theories, and portfolio analysis. *Prerequisites: Econ. 200, Acct. 212, and Math. 281.* (Offered alternate years.)
- Econ. 330 Business Law** **4 hours**
 An introduction to the nature and development of law with particular emphasis on the legal aspects of contracts and other business instruments as set forth in the Uniform Commercial Code. In addition, some of the legal aspects of partnerships and corporations will be presented. (May be taken for credit as Acct. 330.)

Econ. 341 Labor Problems**4 hours**

A general course in labor economics with an emphasis on trade unionism. Attention will be paid to the history and objectives of organized labor, employment and wage theory, managerial labor practices, collective bargaining, current economic and political aspects of labor management, and labor law. *Prerequisite: Econ. 200.* (Offered alternate years.)

Econ. 346 Industrial Organization**4 hours**

A study of the structure, conduct, and performance of modern American industry. The course emphasizes those factors which account for the decline of large-scale manufacturing enterprises and the emergence of smaller enterprises and more competitive industrial markets. *Prerequisites: Econ. 200 and Math. 281.* (Offered alternate years.)

Econ. 350 Business Cycles and Forecasting**4 hours**

An exploration of economic fluctuations in the modern American economy against the backdrop of the alternative theories utilized to explain these fluctuations. Students in the course will be exposed to the quantitative data which describes the cycles and the analytical techniques which are utilized to generate economic forecasts. *Prerequisites: Econ. 200 and Math. 281.*

Econ. 360 International Trade and Transnational Marketing**4 hours**

An examination of the principles of international trade and finance and their application to the modern world. Special emphasis is placed on the following topics: exchange rates, theories of comparative advantage, tariffs, quotas, commercial policy, capital movements, reciprocal effects of changes in micro and macro economic policies, the role of international organizations, and aid to less developed countries. Other topics covered in the course include issues involving transnational marketing strategies, problems, and issues. *Prerequisite: Econ. 200.*

Econ. 399 Problems in Business Administration**2 or 4 hours**

An exploration of selected management problems related to the total enterprise and emerging technostucture. The course also covers managerial and corporate strategy, utilization of resources, and the functional disciplines of management. *Prerequisite: Econ. 200 and permission of the instructor.*

Econ. 470 Internship in Management**4-8 hours**

An internship to provide students with an extensive off-campus learning experience in a management setting. The internship involves off-campus work and a substantive written project. Approval by the department of both the work experience and the academic project is required. The internship must be jointly supervised and evaluated by a member of the faculty and an approved off-campus mentor.

Econ. 477 Senior Seminar**2 hours**

A capstone course integrating the student's background and previous courses in economics and business through case studies and simulation exercises.

Econs. 487-488 Independent Study**2 or 4 hours****Econ. 490 Senior Project****2 hours**

The Senior Project is open only to students majoring in Economics and Business. Students will prepare and present a senior project. The topic for the senior project should be selected before the end of the junior year and must be approved by the head of the department.

Accounting

Acct. 211 Principles of Accounting I**4 hours**

An introduction to the principles and procedures accountants use to process financial information and to present income statements and statements of financial position to external users of the organizations' financial information. Students will study the accounting system's methods of collecting, analyzing, measuring, recording, processing, and finally presenting financial information.

Acct. 212 Principles of Accounting II**2 hours**

A continuation of the study of accounting principles and procedures begun in Accounting 211. *Prerequisite: Acct. 211.*

Acct. 220 Microcomputer Applications in Accounting**2 hours**

An introduction to financial analysis on personal computers including the common command sets, the design and use of spreadsheets, macros, and the design and manipulation of microcomputer based data bases. *Prerequisite: Acct. 211.*

- Acct. 312 Managerial Finance** **4 hours**
 An exploration of corporate organizations and the planning of financial requirements. The course includes an intensive study of cash flow, budgeting, capital decisions, internal financing, and corporate reorganization. *Prerequisites: Acct. 211, 212, and 220.* (May be taken for credit as Econ. 312.)
- Acct. 313 Intermediate Accounting I** **4 hours**
 A presentation of the theoretical foundation of accounting concepts and principles. The course provides an extensive study of the accounting process with emphasis on accounting for cash and temporary investment, receivables, inventories, plant assets, and long-term investments. *Prerequisite: Acct. 212.*
- Acct. 314 Intermediate Accounting II** **4 hours**
 A continuation of Acct. 313 with emphasis on accounting for liabilities, notes, leases, pensions, and owner's equity. Attention is given to special problems in income determination, income taxes, earnings per share, and changing prices. The course concludes with financial statement analysis. *Prerequisite: Acct. 313.*
- Acct. 330 Business Law** **4 hours**
 An introduction to the nature and development of law with particular emphasis on the legal aspect of contracts and other business instruments as set forth in the Uniform Commercial Code. In addition some of the legal aspects of partnerships and corporations will be presented. (May be taken for credit as Econ. 330.)
- Acct. 352 Accounting for Not-for-Profit Organizations** **4 hours**
 A study of accounting systems used to process the financial information of economic organizations not having profit as their primary goal. Students will work on budget preparation and uses and the integration of budgets into the accounting model of assets equalling equities and debits equalling credits. *Prerequisite: Acct. 212.* (Offered alternate years.)
- Acct. 425 Cost Accumulation and Control** **4 hours**
 A study of cost accumulation systems, job order and process, cost controls, flexible budgets and standard costs, and cost, volume, profit relations. Together with the intermediate accounting sequence this course provides a solid foundation in accounting. *Prerequisites: Acct. 212 and either Acct. 314 or permission of the instructor.*
- Acct. 435 Advanced Accounting** **4 hours**
 An introduction to accounting concepts concerning partnership organization and liquidation, branch accounting, consolidated financial statements, bankruptcy and corporate reorganization, and financial reporting by multinational companies. *Prerequisite: Acct. 314.*
- Acct. 441 Federal Income Taxation of Individuals** **4 hours**
 A study of federal income tax law and implementing Treasury Department regulations and procedures governing federal taxation of individuals. Provides a general knowledge of federal individual income taxation rather than specific instructions in completing individual federal tax returns. *Prerequisite: Acct. 212 or permission of the instructor.*
- Acct. 478 Senior Seminar in Auditing** **4 hours**
 A capstone course integrating previous work in accounting. Students will be introduced to accounting concepts concerning the fairness of an organization's financial statements, generally accepted auditing standards, auditor's opinions, internal control and auditor's ethical, legal, and professional responsibilities. Emphasis is placed on case analysis requiring managerial responses to specific accounting problems. *Prerequisites: Acct. 425 and 435.*
- Acct. 490 Senior Project** **2-8 hours**
 Open only to students with a major in accounting. Students will prepare and present a senior project. *The topic for the senior project must be approved by the Head of the Department of Economics and Business.*

Education

Aims

To develop a teacher who is a self-directed decision maker who recognizes the need for personal and professional growth, has the skills necessary to pursue it, and is secure enough to engage in personal and professional self-evaluation.

To develop a teacher who can recognize the needs of young people and utilize the liberal arts background, content preparation, and the principles of education in attempting to meet those needs and facilitates the acquisition of knowledge for that purpose; a teacher who can provide an educational environment to enhance the development (social, emotional, cognitive, and physical) of individuals so that they may make sense of their world and make decisions effectively within that world.

To develop a teacher who can interact effectively within the community and school environment and has the skill and willingness to communicate with people of all ages and backgrounds.

To develop a teacher who also analyzes emerging trends and thinks critically about them in an attempt to arrive at a human balance between the needs of the child, the needs of society, and personal needs in order to perform effectively and ethically.

In summary, to develop a teacher who is a perceptive and aware person who can utilize intellectual skills and knowledge to think critically and pursue self-directed goals.

Requirements for Teacher Certification

A student preparing for certification must plan to complete: (1) the requirements for graduation as described on Page 14, (2) the testing program required by the West Virginia Board of Education in the areas of reading, mathematics, writing, speaking, and listening, (3) a selection of courses providing appropriate background for teaching in a particular field, (4) a sequence of professional education courses and experiences designed to give broad understanding of concepts and skills in teaching.

Bethany is accredited by the National Council for the Accreditation of Teacher Education (NCATE) and is a party to the interstate compact for reciprocity in certification through the West Virginia Board of Education approval of all certification programs offered at Bethany College.

To become eligible for teacher certification, the student must complete a College and state-approved program. It is the student's responsibility to seek appropriate counseling from the Education Department, preferably early in the freshman year, and to become familiar with all of the requirements. *A Guide to Teacher Education*, available in the Education Department Office, gives a full description of all programs.

The department recognizes abilities which students may already have in a given subject matter area and assists them in planning their program accordingly. Waivers or advanced standing granted by the College can be noted on official transcripts so that courses from which a student is exempted may be applied toward certification.

Leadership of children and youth groups, summer camps, scouts, church school, playground supervision, etc., is strongly recommended.

A period of observation and participation in a school is an important and integral part of the education curriculum. Education students are encouraged to consider observation

and participation in an educational agency when planning their intercultural and/or citizenship practicum.

Professional Education

Students preparing to teach at any level must complete the sequence of required professional courses. Required courses cannot be taken credit-no credit.

First Semester	Credit	Second Semester	Credit
Freshman			
Psych. 100 General Psychology	4		
Sophomore			
Ed. 201 Human Development I	4	Ed. 202 Human Development II	4
		Ed. 242 Principles and Curriculum in the Public School	2
(Students must apply for admission to Teacher Education during Ed. 242)			
Junior			
Appropriate methods course(s)	2-4	Ed. 348 Professional Practicum	4
		Appropriate methods course(s)	2-4
(Students must apply for the Professional Year during Ed. 348)			
Senior Professional Block			
Sp. Ed./Psych. 410		Ed. 340 Reading	
Test and Measurements	2	in the Content Areas	2
Ed./Sp. Ed. 470 Observation and Directed Teaching	8		
Ed. 401 History and Philosophy of Education	2		
Appropriate methods seminar(s)	4		
(No other courses permitted)			

Elementary Education (K-8)

A student seeking certification to teach in the elementary school must follow the course of study for MULTI-SUBJECTS K-4 and 5-8. This allows the student to teach in the self-contained classroom. In addition to the Professional Education requirements listed, the student must take related, required courses. A complete listing of these courses is available from the Education Department and is contained in the *Guide to Teacher Education* (available from the department).

Students preparing to teach should discuss their program with the Head of the Education Department. Students are encouraged to pay special attention to Perspectives course choices. A Middle Childhood Specialization may be added to the elementary certificate if all requirements for both levels are met. Specific Learning Disabilities certification is also available to the student who wishes to teach in special education (see below).

The *Guide to Teacher Education*, available in the Education Department office, has specific information about required and related course work.

Specific Learning Disabilities (K-8)

Certification for teaching the child with specific learning disabilities is available as a specialization for the elementary certificate. Students who are interested in this area

of special education must take the required special education courses in addition to the multi-subjects and professional education courses. Further information is available from the Education Department and is contained in the *Guide to Teacher Education*.

Middle Childhood Education (5-8)

Students preparing to teach in middle childhood settings (Middle School and Junior High School) will follow the Professional Education Sequence listed. They must choose two teaching fields from Mathematics, Language Arts, Social Studies, General Science, French, German, Spanish, and Physical Education.

Students preparing to teach at the middle childhood level should discuss their programs with the Head of the Education Department. Two teaching fields are required for a degree in education and certification in West Virginia. Middle Childhood certification may be added to elementary or secondary certification with the advisement and permission of the Education Department. A *Guide to Teacher Education* gives a full description of all programs leading to certification in West Virginia. The *Guide* is available in the Education Department.

Each student is responsible for planning a program for meeting certification requirements.

Secondary Education

Students preparing to teach in secondary schools are expected to follow the sequence of required education courses listed in the Professional Education sequence. General distribution requirements, other requirements for graduation, and requirements for the student's field of concentration, must be added. The required education courses cannot be taken Credit-No Credit.

Students preparing to teach at the secondary level should discuss their program with the Head of the Education Department, as well as the person responsible for the Teacher Education Program in the major field. Students interested in French, German, Spanish, Mathematics, English, Social Studies, General Science, and Physical Education must complete the Middle Childhood (5-8) program in their field. Physical Education candidates may plan for K-12 certification. A *Guide to Teacher Education* gives the full description of all programs leading to certification in West Virginia. The *Guide* is available in the Education Department.

Teaching fields include: Biology, Chemistry, Physics, French, German, Spanish, English, Physical Education, Social Studies.

Education (Non-School Settings)

The Education Department provides for a field of concentration, without public school certification, to allow students to prepare for a variety of roles in non-school settings, such as 1) training program development and implementation in business and industry, 2) policy planning roles in state and federal agencies, and 3) higher education instruction in foundation areas.

Courses required are Sp. Ed. 410; Education 201, 202, 242, 302, 348, 401, 475, and 490.

In addition, each student will propose a program of study in one of the following areas of specialization: Human Resources Management and Training, Education Policy Planning, Educational Foundations, or other identified pre-professional areas of study within the discipline. Courses will be determined through the development of a program proposal based upon the student's career and study goals.

Psychology/Education Interdisciplinary Program

The Education Department and the Psychology Department offer an Interdisciplinary Degree for students interested in preparing for school and child related careers. Information concerning this program can be obtained from the Education Department or the Psychology Department.

Admission to Teacher Education

During Education 242 (Principles and Curriculum in the Public School), written application for admission to teacher education should be submitted to the Education Department on forms obtained from the department office.

The following criteria must be met to be admitted to the program:

1. Grade point average: 2.50 overall, in education, and in proposed field of study.
2. Two positive recommendations from faculty and/or staff of Bethany College.
3. Successful scores on the Preprofessional Skills Test (reading, mathematics, and writing).
4. Positive recommendation by Education Department.

The student may be granted full admission, provisional admission, or may be denied admission. Appeal of the decision can be made through the Director of Teacher Preparation Programs to the Educational Personnel Preparation Advisory Committee. A full description of criteria and procedures can be found in the *Guide to Teacher Education*.

Retention

A student must maintain the required level of performance and must show continued professional behavior. A student's qualifications may be reviewed at the end of any semester if such a review is deemed necessary.

Admission to the Professional Year

During Education 348 (Professional Practicum), each student must apply for admission to the professional year which includes student teaching. The following criteria must be met:

1. Successful completion of the speaking activities on ACT-Comp.
2. Successful completion of the Listening Test.
3. Grade point Average: 2.50 overall, in education and in the field(s) of study.
4. Positive recommendations from the department in which the student is seeking certification.
5. Positive recommendation from the Education Department.
6. All appropriate prerequisite courses must have been successfully completed.

The student may be granted full admission, provisional admission, or may be denied admission. Appeal of the decision can be made through the Director of Teacher Preparation Programs to the Educational Personnel Preparation Advisory Committee. A full description of criteria and procedures can be found in the *Guide to Teacher Education*.

Application for Certification

Following completion of student teaching and near the completion of the program, each student should initiate application procedures for certification. The following criteria must be met for certification in West Virginia:

1. Grade Point Average: 2.50 overall, in education, and in the area(s) of certification.
2. Successful completion of the West Virginia Board of Education Subject Area competency examination.
3. Successful completion of the Comprehensive Examination in area of concentration and in Education (Secondary Certification candidates should see the Head of the Education Department).
4. Successful completion of student teaching and all required course work.
5. Recommendations from the Education Department and from the student's area of certification.
6. All requirements for the initial degree must be met.

Note: Graduation from Bethany College does not guarantee certification in the state of West Virginia. The student must meet all the criteria for certification as determined by the College and by the West Virginia Board of Education.

All required testing can be arranged through the Education Department at the appropriate times in the student's career at Bethany College.

The student may be recommended for full certification at the initial level, or may be eligible for a temporary permit. A student who fails to meet criteria may be denied recommendation. Appeal of the decision can be made through the Director of Teacher Preparation Programs to the Educational Personnel Preparation Advisory Committee. A full description of criteria and procedures can be found in the *Guide to Teacher Education*.

Competency-Based Professional Block: Student teaching is conducted for the entire first semester of the senior year in area schools or off-campus centers. Related course work is integrated with student teaching to provide direct application to field experience. Students assigned to off-campus centers may need to live in the community where the center is located. The College will assist in locating housing if desired, and with other details of the arrangement.

Students are not permitted to schedule courses in conflict with the block during the semester they are enrolled in it, or carry extra-curricular activities which interfere with the requirements imposed by the block. Arrangements can usually be made for practice and participation in varsity sports. Any exceptions to the above must be approved by the head of the department concerned and by the Dean of the Faculty. Students should *not* register for other than the prescribed Professional Block courses without written permission from the Education Department.

Ed. 201 Human Development I **4 hours**
The study of individual and group development from infancy to adolescence. Observation and first-hand contacts with children are included. Educational programs are considered in terms of the total child development. *Freshmen not admitted.*

Ed. 202 Human Development II **4 hours**
The study of individual and group development from adolescence through senescence. Applications are made in relation to learning theory, self-understanding, and preparation for working with young people. *Freshmen not admitted.*

Ed. 242 Principles and Curriculum of the Public School **2 hours**
An introductory course exploring the goals of education and their implementation, the role of the teacher, and professional concerns while applying the concepts of human development.

Ed. 275 Student Development in Higher Education **2 hours**
A study of the philosophy of higher education and the development of the individual student within the college environment. Emphasis is placed upon personal growth, communication skills, group dynamics, and residence hall programming. Didactic and experiential learning in the areas of personal, academic, and vocational counseling is included. *Enrollment limited to Resident Assistants.* (May be taken for credit as Psychology 275.)

Ed. 289 Children's Literature **2 hours**
An examination of literature for children, including consideration of background and history, current literature, skills for critical analysis, and approaches to using literature. Students enrolled in the course work with children. (May be taken for credit as English 289.)

Ed. 290 Literature and Adolescence **2 hours**
The examination of important works about or of special interest to young people of junior high school through high school age. Techniques of presenting the works are considered. Readings are primarily in short stories and novels. Required for students preparing to teach secondary school English. (May be taken for credit as English 290.)

Ed. 300-309 Issues in Education
Courses focusing on special topics in Education for majors and non-majors.

Ed. 300 Juveniles, Law, and School **4 hours**
A review of the social and legal status of juveniles to 1899, through the Warren Court, and today. Law libraries, Supreme Court, decisions, juvenile authorities, detention centers, and school and college authorities will provide applications for the basic concept of justice as it applies to juveniles in this country.

Ed. 301 Educational Ethnography: Field Research in the Schools **4 hours**
An investigation of the process of constructing, through direct observation, a theory of the working of a particular culture (i.e., schools). Students study the theoretical base, rationale, and methodology used in collecting and analyzing data by means of an ethnographic approach.

Ed. 302 School and Society **4 hours**
A study of the role of schools in a society, of the school as a formal and informal organization, and of the function of schooling. The course applies the methodologies of the disciplines of education, sociology, and other social sciences. Case studies and on-site observations combine with a variety of readings to provide a wide range of viewpoints for students to evaluate. (May be taken for credit as Sociology 302.)

Ed. 328 Human Sexuality **2 hours**
An examination of psychological, biological, social, comparative, legal, and ethical aspects of human sexuality. In addition to sexual anatomy, physiology, birth control, and sexually transmitted disease, the course takes up current issues such as a sex-role development and sex therapy. (May be taken for credit as Psychology 328.)

Ed. 340 Teaching Reading in the Content Areas **2 hours**
An introduction to diagnostic and prescriptive teaching techniques. Both the corrective techniques for the remedial reader and the higher order cognitive skills will be included. In addition to classwork this course includes two hours weekly of tutoring middle school, secondary, or college students who have been recommended by their advisors for help in reading. *Prerequisite: Ed. 348.*

Ed. 344 Teaching Skills Laboratory **Non-credit**
The study and practice of specific teaching skills related to the technical and media areas of education. Students must complete the required work prior to student teaching. Information related to the course work is available from the Education Department office. Elementary and secondary.

- Ed. 345 Methods and Content in Elementary and Middle Childhood I: Mathematics** **4 hours**
The practical application of arithmetical skills, including the understanding of fundamental processes, comparison of different philosophies in teaching arithmetic, the elements of modern math, and the theoretical and practical application of the metric system at all levels of the curriculum. Classroom experience in public schools. *Prerequisites: Math 250 or permission of the instructor, Ed. 242.*
- Ed. 346 Methods and Content in Elementary and Middle Childhood II: Language Arts** **4 hours**
An exploration of teaching the skills of reading, listening, speaking, and writing as they relate to the total curriculum. Emphasis on teaching of reading and the integration of the related areas in language arts. Students are expected to demonstrate competence in appropriate audio-visual aids. Classroom experience in public schools. *Prerequisite: Ed. 242.*
- Ed. 348 Professional Practicum** **4 hours**
An experience to prepare the prospective teacher for a professional role as observer and participant in the classroom. *Prerequisite: Ed. 242.*
- Ed. 350 Reading: Diagnosis and Prescription** **2 hours**
The study of methods for dealing with reading disabilities within the content areas. Format will include diagnosis of specific problems and their origins as well as prescription for correction and remediation. Those enrolled in the course will participate in laboratory situations to tutor disabled readers. (To be taken following or concurrent with Ed. 340 or Ed. 346.)
- Ed. 355 Mathematics: Diagnosis and Prescription** **2 hours**
The study of methods for dealing with corrective and remedial situations in mathematics. Format will include diagnosis of specific problems and their origins as well as prescription for corrections and remediation. Those enrolled in the course will participate in laboratory situations to tutor students with problems in mathematics. (To be taken following or concurrent with Ed. 345.)
- Ed. 401 History and Philosophy of Education** **2 hours**
A study of the development of modern education in social, historical, and philosophical perspective, emphasizing backgrounds of present practices, current problems, and issues. Current practice is analyzed in terms of philosophic rationale and applications are made to the school situation.
- Ed. 428 Principles and Techniques of Secondary Education** **4 hours**
An examination of aims, functions, and curriculum organization of middle, junior high, and senior high schools. Basic strategies, materials, and techniques, including evaluation applicable to teaching, are integrated with a full semester of student teaching in schools. Certification and employment procedures, professional practices, and continuing education are also considered. *Prerequisite: Ed. 348.*
- Ed. 447 Methods and Content in Elementary and Middle Childhood III: Science** **2 hours**
The study of the concepts of the sciences approached through various methods, including unit study, inquiry, experimentation, and the process approach. Practical application in school situation. *Prerequisite: Ed. 348.*
- Ed. 448 Methods and Content in Elementary and Middle Childhood IV: Social Studies** **2 hours**
The study of the concepts of social studies approached through various methods, including unit study, inquiry experimentation, and the process approach. Practical application in school situation. *Prerequisite: Ed. 348.*
- Ed. 470 Observation and Directed Teaching** **4 or 8 hours**
Directed full-semester or half-semester observation and student teaching in schools with partial assignments in appropriate grade levels; to include weekly student teaching seminars and a minimum of 150 clock hours actual teaching. Students must make applications for student teaching prior to advance registration. Other course or activities which might interfere with student teaching are not permitted. (Concurrent with enrollment in the Education Year. CR/NCR course.)

- Ed. 475 Professional Internship** **4 hours**
Participation in an adult training and/or educational program appropriate to the student's area of study and potential employment. Students will apply the skills and knowledge gained in previous courses.
- Ed. 480 Methods and Materials in Teaching** **2 or 4 hours**
See courses numbered 480 offered by Biology, Chemistry, English, Fine and Applied Arts, Foreign Languages, General Sciences, Mathematics, Physical Education, Physics, Psychology and Social Sciences.
- Ed. 484 Methods of Teaching English as a Foreign Language** **2 hours**
A directed study of techniques for teaching English vocabulary, spelling, and grammar to native speakers of other languages. Practical experience through tutoring.
- Ed. 487-488 Independent Study** **2 or 4 hours**
- Ed. 490 Senior Project** **2-8 hours**

Special Education

Sp. Ed. 205 Introduction to the Exceptional Learner **2 hours**
A study of recent social, legal, and educational trends related to the handicapped student and of the characteristics and educational methods for various areas of exceptionalities. This course is designed to serve as an integral part of the preparation of teachers of Specific Learning Disability students and others who are involved with exceptional students educationally.

Sp. Ed. 206 Educating the Specific Learning Disabilities Student **4 hours**
An introduction to the characteristics of the Specific Learning Disability (SLD) student and models of intervention, mainstreaming, and roles of resource room, consulting room, and teachers of self-contained classrooms. A field placement is required for this course. *Prerequisite: Sp. Ed. 205.*

Sp. Ed. 320 Teaching Methods for Specific Learning Disabilities: Early and Middle Childhood **2 hours**
A study of SLD methods for early and middle childhood that stresses intervention strategies for different levels of severity. This course is designed to instruct Specific Learning Disability (SLD) teachers in methods and models of intervention and synthesis of the diagnostic-prescriptive model. *Prerequisite: Sp. Ed. 206.*

Sp. Ed. 410 Tests and Measurements **2 hours**
The study of a variety of assessment instruments for the purpose of educational evaluation placement, diagnosis, and intervention. Students will administer formal tests and develop informal tests as a means of acquiring skills with standardized, norm-referenced, criteria-referenced, diagnostic, and achievement tests to provide appropriate educational programs for the learning disabled student. *Prerequisite: Ed. 348.* (May be taken for credit as Psychology 410.)

Sp. Ed. 470 Observation and Directed Teaching: Specific Learning Disabilities **4 hours**
A directed half-semester observation and student teaching in schools with partial assignments in appropriate specific learning disabilities placements, to include weekly student teaching seminars and a minimum of 150 clock hours actual teaching. Students must make application for student teaching prior to advance registration. Other course or activities which might interfere with student teaching are not permitted. Concurrent with enrollment in the Education Year and Education 470 (4 hours credit). Credit-No-Credit.

Sp. Ed. 475 Professional Internship **4 hours**
Participation in an adult training and/or educational program appropriate to the student's area of study and potential employment. Students will apply the skills and knowledge gained in previous courses.

English

Aims

To help students to develop and maintain the ability to write clear and effective English; to guide them toward an increased understanding and critical appreciation of their literary heritage; to help prepare them for graduate and professional study. In addition, the department provides programs that prepare students for certification as teachers of English and Language Arts.

Requirements for Field of Concentration

1. Concentration in English requires a minimum of 32 hours in the department, exclusive of the Senior Project. The following courses are required: 140 or 150, 325-326, 330, 341-342, 477. Related requirements are Interdisciplinary Studies 251, 252. Students should also elect at least one Seminar in British Literature (courses numbered 440-449), and at least one Seminar in American Literature (courses numbered 450-459). These seminars, together with other advanced courses or independent study, will extend the student's knowledge of one or two areas of literature, provide background for the Senior Project, and help to prepare for future study or a career. Thus, the program of a student preparing for the law or another profession will be different from that of a student preparing for graduate study in English or for secondary school teaching.
2. At least 12 hours in another department should be included in the field of concentration. These courses may be related to the student's special interests or vocational plans.
3. Students planning to attend graduate or professional schools should prepare to meet foreign language reading requirements.
4. Students are not accepted for concentration in English later than the beginning of their fifth semester unless they have completed English 140 (or 150) and either English 325-326 or English 341-342.
5. Students concentrating in English are expected to attain a minimum grade of C in all courses in the department.
6. Only students who have completed the following courses or their equivalents will be recommended for certification to teach English in secondary school: Eng. 140 or 150, 210, 325-326, 341-342, 370, 375, 483; FAA220; Eng. 290 or Ed. 290, Ed. 340, Eng. 480 or Ed. 480. Students must also complete certification requirements for Language Arts 5–8. Students interested in teaching should consult the Education Department listings for required courses in Professional Education.

Writing Proficiency Program

The Writing Proficiency Program is administered by the English Department. Students should complete the program and meet the writing proficiency requirement for graduation before the beginning of the senior year.

Students must achieve and maintain an above-average level of proficiency in expository writing by taking the annual Writing Qualification Test or by satisfactory completion of selected writing courses offered by the English Department.

Students who choose to satisfy the requirement by enrolling in writing courses may do so by electing from the following: English 100, 120, 125, 140, 150, 209, 210, 213, or 351. No more than one course per academic year will apply to the requirement. See below for the number of courses needed to satisfy the writing proficiency requirement.

The Department of English will certify to the Registrar that a student has satisfied the writing proficiency requirement for graduation when proficiency has been demonstrated in one of the following ways:

1. By achieving a high level of proficiency on both the first Writing Qualification Test, taken in November of the freshman year, and the second Writing Qualification Test, taken in March or April of the sophomore year; or by achieving a grade of C+ or better in a writing course taken instead of either or both of these tests. *A student whose proficiency is certified in this way is not required to take additional tests or courses.*
2. By taking the first Writing Qualification Test in November of the freshman year and achieving a high level of proficiency on the third test, taken in April of the junior year.
3. By achieving a grade of C+ or better in a writing course taken in the junior year.
4. By achieving a grade of B or better in any writing equivalency course taken either the freshman or sophomore year.

Students who have not met the writing proficiency requirement before the beginning of their seventh semester must enroll in English 120, a non-credit, non-graded course in expository writing. Special Writing Qualification Tests are given as part of this course, and students must continue in the course until they have achieved a high level of proficiency on one of the special tests. Writing Qualification Tests are given to seniors only when enrolled in the course.

Special arrangements are made for students who transfer from other colleges. Transfer students should consult the Department of English immediately upon enrolling at Bethany.

Writing tests are given according to the following schedule:

November

Writing Qualification Test: Freshmen (Required)

February

Diagnostic Qualification Test: All students entering in February

April

Writing Qualification Test: Sophomores (Advisory) and Juniors (Required)

Eng. 100 College Composition

4 hours

A basic course for training and practice in the process of writing effective essays from the prewriting stage through final revision and polishing. Emphasis is on audience and purpose, point of view, organization, and style. Formal assignments encourage students to write the types of essays they are likely to encounter in other college courses, including documented reports.

Eng. 120 Expository Writing

Non-credit

An intensive course for training and practice in writing essays. (Required of all students who have not met the writing proficiency requirement before the beginning of their seventh semester. Not open to others.)

Eng. 125 Expository Writing Workshop

2 hours

An intensive course for training and practice in writing clear and effective expository prose. After an initial diagnosis, an individual program is designed for each student. (Offered as a substitute

for English 100 and an alternative to English 120. May not be taken on a credit-no credit basis.)

Eng. 140 Introduction to Literature **4 hours**
An introduction to the study of poetry, drama, and fiction. Emphasis is on the development of techniques for the analysis and evaluation of poetry, drama, and fiction and on the writing of literary essays. (Open to all students. Required for concentration in English.)

Eng. 150 Honors Freshman English **4 hours**
An introduction to the principles of critical reading and writing and to the analysis and evaluation of poetry, drama, and fiction. Intensive practice in expository and imaginative writing with emphasis upon the achievement of clarity and accuracy. A course for freshmen of superior ability and accomplishment. (May be substituted for Eng. 140 to fulfill requirement for concentration in English and prerequisites for English courses. Enrollment by invitation only.)

Eng. 160 Introduction to Film **4 hours**
An introduction to the study the film as a technical artifact, an art object, a mirror of society, and a moral statement. Students view twelve classic films such as Chaplin's *City Lights*, Resnais's *Hiroshima Mon Amour*, Bergman's *Virgin Spring*, and Hitchcock's *Psycho*. Fee. \$15.

Eng. 170 Introduction to Poetry **4 hours**
A study of poetic forms and techniques, with some consideration of the historical development of poetry in English. Emphasis is on developing the student's ability to read, understand, and evaluate poems.

Eng. 205 Writing for Business and Industry **2 hours**
An introduction to writing formal and informal reports, summaries, business letters, job descriptions, applications, and resumes. Each student will complete approximately 10 writing assignments. *Prerequisite: English 100 or demonstrated competence in expository writing.*

Eng. 209 Technical Writing **4 hours**
A workshop for training and practice in the written communication of specialized information to audiences with varying levels of knowledge. Emphasis is on the analysis of audiences and purposes, the selection and organization of information, the creation of informative graphics, and the manipulation of conventional formats to develop concise and effective instruction sets, descriptive analyses, abstracts, occurrence reports, literature reviews, feasibility studies, proposals, investigative reports, and other types of writing usually required of professionals. Students will make use of the College's computer facilities for word processing and for generating graphs, charts, and lists.

Eng. 210 Creative Writing Workshop **2 hours**
An intensive workshop for training and practice in the creative aspects of expository and imaginative writing. Students write essays, sketches, short fiction, poems, and dramatic scenes. (Required for students preparing to teach secondary school English. Enrollment limited to 15 students with preference given to juniors and seniors. May be repeated once for additional credit.) *Prerequisite: English 100 or its equivalent.*

Eng. 213 Advanced Expository Writing **2 hours**
An examination of and intensive practice in writing expository prose with emphasis upon the achievement of literary excellence. (Enrollment limited to 15 students with preference given to juniors and seniors.) *Prerequisite: English 100 or the equivalent.*

Eng. 261-262 British Novel **2 hours each**
A study of the development of the British novel from the 18th century to the present. 261: Defoe through Dickens. 262: Hardy to the present.

Eng. 263-264 American Novel **2 hours each**
A study of the development of the American novel from the 19th century to the present. 263: Beginnings through World War I. 264: 1920s to the present.

Eng. 266 Masterpieces of Western Literature **4 hours**
A study of major works from the Middle Ages through the nineteenth century. Such works as the following will be considered: Dante's *Divine Comedy*, Rabelais' *Gargantua and Pantagruel*, Cervantes' *Don Quixote*, Swift's *Gulliver's Travels*, Goethe's *Faust*, and Tolstoy's *Anna Karenina*.

Eng. 267 Mythology **2 hours**
A study of Greek and Roman myths and their later use in Western art, literature, music, and science. Brief comparative study of Celtic and Germanic myths.

Eng. 268 Modern World Literature **4 hours**
A study of the work of writers representing the diverse cultural traditions of the modern world. In addition to the works representing the western tradition, works will be studied representing such traditions as the Eastern European, the Middle Eastern, the African, the Latin American, and the Oriental.

Eng. 270 Shakespeare **4 hours**
A rapid reading of the major plays with emphasis upon Shakespeare's themes, motifs, language, and characterization. (May be taken for credit as Fine and Applied Arts 270.)

Eng. 280-289 Colloquium in Literature **2 or 4 hours each**
A series of courses for the discussion of special topics in literature. (Enrollment in each course limited to 20 students.)

Eng. 287 The Fiction of Southern Women **2 hours**
An analysis and evaluation of novels and short stories written by women authors from the southern United States, from Kate Chopin to Alice Walker. Emphasis is on both the literary and social aspects of the works studied.

Eng. 289 Children's Literature **2 hours**
An examination of literature for children, including consideration of background and history, current literature, skills for critical analysis, and approaches to using literature. Students enrolled in the course work with children. (May be taken for credit as Education 289.)

Eng. 290 Literature and Adolescence **2 hours**
The examination of important works about or of special interest to young people of junior high school through high school age. Techniques of presenting the works are considered. Readings are primarily in short stories and novels. *Required for students preparing to teach secondary school English.* (May be taken for credit as Education 290.)

Eng. 325-326 British Literature **4 hours each**
An analysis of the development of British literature from the beginning through the Victorian Period. First semester: from *Beowulf* through Milton. Second semester: from the Restoration to the end of the 19th century. (Required for concentration in English.) *Prerequisite: Eng. 140 or permission of the instructor.*

Eng. 330 Twentieth-Century British Literature **4 hours**
A study of important works of British fiction and drama during this century. Writers to be included: Eliot, Yeats, Woolf, Joyce, Beckett, and Pinter. (Required for concentration in English.) *Prerequisite: Eng. 140.*

Eng. 341-342 American Literature **4 hours each**
An examination of the development of American literature from the Colonial Period to the present with emphasis upon the writers of the 19th and 20th centuries. *Prerequisite: Eng. 140 or permission of the instructor.*

Eng. 351 Literary Criticism **4 hours**
A study of the history of literary criticism, literary theory, and applied approaches to literary criticism. Special emphasis will be placed on the preparation of essays which apply various theories and demonstrate various critical points of view.

Eng. 370 Development of Modern English **4 hours**
An introduction to the history of the English language from Anglo-Saxon to modern English with emphasis upon the structure and vocabulary of the latter. (Required for students preparing to teach secondary school English.) Not open to Freshmen.

Eng. 375 English Grammar **2 hours**
The description and analysis of the grammar of the English language. Various grammatical systems are considered, such as the traditional, the structural, and the transformational-generative. (Required for students preparing to teach secondary school English.)

Eng. 420-429 Seminar in Major Authors **2 or 4 hours each**
The advanced study of one or more major British, American, or European authors. (Enrollment in each course limited to 12 students. Topics change regularly.) *Prerequisite: previous study of the author or authors in a survey course.*

Eng. 421 Hemingway **2 hours**
A study of selected fiction by Ernest Hemingway. Emphasis will be on the Nick Adams stories, *A Farewell to Arms*, and *The Old Man and the Sea*.

Eng. 423 Johnson and Boswell **4 hours**
A study of the life and selected works of Samuel Johnson and of James Boswell as journalist and biographer.

Eng. 440-449 Seminar in British Literature **2 or 4 hours each**
The advanced study of a period, movement, or tradition in British literature. (Enrollment in each course limited to 12 students. Topics change regularly.) *Prerequisite: previous study of the period, movement, or tradition in a survey course.*

Eng. 442 Renaissance Literature and Christian Epic **4 hours**
A study of the development of Christian epic from Tasso to Spenser and Milton. Emphasis on the use of allegory and the structure of the heroic poem. *Prerequisite: Eng. 325, I.S. 252.*

Eng. 444 Age of Johnson **4 hours**
A study of the major prose, poetry, and drama of the mid-eighteenth century with emphasis upon the work of Samuel Johnson and the members of his circle, including Boswell, Goldsmith, and others.

Eng. 445 Victorian Writers **4 hours**
The investigation of major poems by Tennyson (*In Memoriam* and *Idylls of the King*) and Browning (*The Ring and the Book*), poems and criticism by Matthew Arnold, and novels by Dickens, Thackeray and George Eliot.

Eng. 450-459 Seminar in American Literature **2 or 4 hours each**
The advanced study of a period, movement, or tradition in American literature. (Enrollment in each course limited to 12 students. Topics change regularly.) *Prerequisite: previous study of the period, movement, or tradition in a survey course.*

Eng. 450 Recent American Literature **4 hours**
A study of American poetry, drama, and fiction since World War II. Emphasis is on the analysis of works representing the various ideas, techniques, styles, and movements characterizing the writing of the last forty-five years.

Eng. 451 Short Fiction in the Romantic Period **2 hours**
A study of tales, fictional sketches, short stories, and novellas written in the United States from the early nineteenth century to the Civil War. Emphasis is on the development of short fiction during the period and on the analysis and evaluation of particular works. Writings by such authors as Poe, Irving, Hawthorne, and Melville are considered.

Eng. 456 The 1920's **4 hours**
A study of the poetry, drama, fiction, and critical writings of the 1920's. Emphasis is on such major writers as Pound, Eliot, Fitzgerald, Hemingway, Faulkner, and O'Neill; but other important writers are also studied.

Eng. 457 Hawthorne, James, and Faulkner **4 hours**
A study of critical and fictional works of Hawthorne, James, and Faulkner. Emphasis is on ideas, themes, and techniques.

Eng. 477 English Seminar **2 hours**
The undertaking of reading and research designed to help students review and organize their knowledge of literature. *Prerequisites: English 140 or 150, 325-326, 330, 341-342 or permission of the instructor.*

Eng. 480 Methods of Teaching English **2 hours**
The exploration of materials and methods of teaching of high school composition and literature. Literary analysis, systems of grammar, and reading improvement are examined. (May be taken for credit as Education 480.)

Eng. 483 Theory and Practice of Teaching Composition **2 hours**
An examination of historical and current theories of composition as a conceptual background for both teaching and writing. Students will study research and theory on the writing process. Students will practice both writing and teaching writing.

Eng. 484 Methods of Teaching English as a Foreign Language **2 hours**
A directed study of techniques for teaching English vocabulary, spelling, and grammar to native speakers of other languages. Practical experience through tutoring. (May be taken for credit as Education 484.) *Offered upon request.*

Eng. 487-488 Independent Study **2 or 4 hours**
Individual study in any area of English for which the student is qualified. Independent study is offered only in areas not included in other courses in the department. *Prerequisites: Adequate preparation to undertake the study as determined by the instructor; permission of the head of the department.*

Eng. 490 Senior Project **2-8 hours**
Generally consists of a major critical paper on a topic developed from at least one of the student's elective courses in the department. During the junior year, the student should determine an area of interest and make a preliminary investigation of it after consulting with his or her mentor (the faculty member best qualified to assist in the project). Reading and research should continue during the student's senior year, and much of the final semester should be devoted to preparation of the paper. Sometimes the project may take other forms. Students wishing to undertake an unusual project must consult with the head of the department no later than the beginning of the fourth semester. Credit for the senior project is not included in the total number of hours required for concentration in English

Fine and Applied Arts

Aims

The Fine and Applied Arts Department provides study in the visual arts, theatre, graphics design, and music. The purpose of the department is to give expression to the historical and aesthetic unity of the various forms and modes of fine arts and, at the same time, to permit students to pursue application in the arts.

Requirements for Field of Concentration

Students concentrating in Fine and Applied Arts will take Fine and Applied Arts 101, 102, 103, 477, and 490. Related requirements are Interdisciplinary Studies 251, 252. In addition, the concentration requires the completion of one of the following departmental emphases: 1) Two-Dimensional Art — 200, 201, 203, 211, 212, 311, 312; 2) Three-Dimensional Art — 200, 201, 211 or 212, 213, 310, 313; 3) Design — 200, 205, 214, 215, 314, 315, 316; or 4) Theatre — 151, 152, 153, 220, 230, 270, 320, 420, and English 210. Students interested in the field of Arts Management should also complete the Professional Core Program in Management and Fine and Applied Arts 399.

FAA 101 Introduction to Art **4 hours**
An historical and aesthetic study of the visual arts from the ancient world to the present. Representative masterworks of art are studied, and consideration is given to aesthetic functions and values.

FAA 102 Introduction to Music	4 hours
An historical and aesthetic study of music from Gregorian Chant to the present. Representative masterworks of music are studied, and consideration is given to aesthetic functions and values.	
FAA 103 Dramatic Literature and Theatre Development	4 hours
A survey of drama and theatre architecture and design with emphasis on both primary and secondary literature in both historical and aesthetic context.	
FAA 105-106 College Choir	1 hour each
Preparation for performance of choral music. (Activity course: CR/NCR only.) <i>Enrollment by audition.</i>	
FAA 107-108 Instrumental Ensemble	1 hour each
Preparation for performance of standard ensemble literature according to instrumentalists available. (Activity course: CR/NCR only.) <i>Enrollment by audition.</i>	
FAA 109-110 Jazz-Rock Ensemble	1 hour each
Preparation for performance of contemporary jazz and rock arrangements. (Activity course: CR/NCR only.) <i>Enrollment by audition.</i>	
FAA 111-112 Piano	1 hour each
Private instruction in the techniques, theory, and literature of the piano. (Activity course: CR/NCR only.) <i>Enrollment by permission of the instructor.</i>	
FAA 113-114 Strings	1 hour each
Private instruction in the techniques, theory, and literature of violin, viola, cello, or bass. (Activity course: CR/NCR only.) <i>Enrollment by permission of the instructor.</i>	
FAA 115-116 Winds	1 hour each
Private instruction in the techniques, theory, and literature of the brass and woodwind instruments. (Activity course: CR/NCR only.) <i>Enrollment by permission of the instructor.</i>	
FAA 117-118 Voice	1 hour each
Private instruction in the technique, theory, and literature of voice. (Activity course: CR/NCR only.) <i>Enrollment by permission of the instructor.</i>	
FAA 120 Music as Art and Science	2 hours
This course provides an aural study of classical and popular music within an aesthetic perspective. It surveys various musicians within various genres and does not presuppose any previous musical background. (Required of all students concentrating in Elementary Education.)	
FAA 125 Art Activities in the Elementary Schools	4 hours
A study of the theories and goals of art education in the elementary school with emphasis on the child's growth and development through art. Exploration of art techniques is included.	
FAA 151 Fundamentals of Stage Construction	2 hours
FAA 152 Theatre Lighting	2 hours
FAA 153 Theatre Make-up	2 hours
FAA 154 Costuming	2 hours
FAA 155 Scene Painting	2 hours
FAA 200 Introduction to Two-Dimensional Design	4 hours
An introduction to the theories and practice of two-dimensional design; study of the elements and materials in relation to design potentials with practical applications.	
FAA 201 Introduction to Three Dimensional Design	4 hours
An introduction to the theory and practice of three-dimensional design. Consideration is given to the relation between the design potential of various materials and their practical applications.	
FAA 203 Printmaking	4 hours
The study of printmaking processes emphasizing creative expression through such techniques as relief, intaglio, planography, and serigraphy.	

- FAA 205 Airbrush Techniques** **2 hours**
The course covers beginning through advanced airbrush techniques. Exploration of various hues — graphic design, photo retouching, ceramics, and painting.
- FAA 206 Interpersonal Communication: Public Speaking** **4 hours**
An introduction to the dynamics of communication: levels of interaction between speaker and listener; developing the use of voice and non-verbal signals; understanding oral style in language and logical argument in public speaking; focus on the design and delivery of short speeches and on critical listening. (May be taken for credit as Communications 206.)
- FAA 210 Ceramics I** **4 hours**
A concentrated study of the history and various techniques of ceramic art, including studio experience in forming, firing, and glazing pottery and ceramic sculpture.
- FAA 211 Drawing I** **4 hours**
A concentrated study of the aesthetics and techniques of drawing, including studio experience in such fundamentals as proportion, perspective, and value.
- FAA 212 Painting I** **4 hours**
A concentrated study of the aesthetics and techniques of painting, including studio experience in the fundamentals of composition, color, style, and materials.
- FAA 213 Sculpture I** **2 hours**
The course emphasizes creative expression in three-dimensional forms. Students work with materials that are readily available and easily handled such as wood, wire, plaster, and clay. *Prerequisite: FAA 201 or permission of the instructor.*
- FAA 214 Lettering and Layout** **4 hours**
An introduction to calligraphy, typography, letter forms, and layout, with emphasis on design, legibility, and creative practice.
- FAA 215 Design Application** **4 hours**
This course emphasizes problem solving experiences as related to visual communications. The mechanics and psychology of two-dimensional and three-dimensional design are explored as a foundation for graphic design.
- FAA 220 Beginning Acting** **2 hours**
A study of movements, various styles, improvisations, projections of character, and speech technique. The course includes a 10-20 minute planned and rehearsed program that demonstrates skills acquired in improvisation and body and voice techniques.
- FAA 225 Dance for Non-Dancers** **2 hours**
The development of beginning dance skills with emphasis upon improvisational dance modes and creative body language.
- FAA 230 Children's Theatre** **2 hours**
The development of techniques required in writing for and performing before children.
- FAA 235 Musical Comedy** **2 hours**
A study of musical comedy scores and libretti, basic principles of musical comedy singing, dancing, and acting, and other fundamentals of the genre.
- FAA 270 Shakespeare** **4 hours**
A rapid reading of the major plays with emphasis upon Shakespeare's themes, motifs, language, and characterization. (May be taken for credit as English 270.)
- FAA 310 Ceramics II** **2 hours**
A study of problems in media and subject matter selected by the student with the advice of the instructor. *Prerequisite: FAA 210.*
- FAA 311 Drawing II** **2 hours**
The course provides advanced studio experience in drawing. *Prerequisite: FAA 211.*
- FAA 312 Painting II** **2 hours**
The course provides advanced studio experience in painting. *Prerequisite: FAA 212.*

FAA 313 Sculpture II	2 hours
A study of problems in media and subject matter selected by the student with the advice of the instructor. <i>Prerequisite: FAA 213.</i>	
FAA 314 Computer Graphics and Applied Design	4 hours
An examination of practical applications of graphics and communication design techniques as related to the computer and other technological aids. <i>Prerequisites: FAA 214 and 215.</i>	
FAA 315 Television Graphics	4 hours
The course emphasizes design of visual symbols for television. Combines principles of graphic art with the particular requirements of television production. <i>Prerequisite: FAA 314.</i>	
FAA 316 Graphics Design Practice	4 hours
A study of professional procedures, structures, communication functions, and processes as applied to areas of graphic design. <i>Prerequisites: FAA 214 and 215.</i>	
FAA 320 Advanced Acting	2 hours
The course emphasizes scene study as a unit of theatrical form. Scenes from various periods to be directed and performed. Focus on interaction between characters. <i>Prerequisite: FAA 220.</i>	
FAA 399 Fine Arts Management	2 hours
The study of management principles and practices as applied to agencies and institutions in the various fields of the arts, such as museums, galleries, symphonies, theatres, and others.	
FAA 416 Opera	2 hours
This course is designed to introduce the general student to operatic techniques and conventions. The principal emphasis will be on the ways in which music enhances dramatic elements in operas of Mozart and Verdi. No technical knowledge of music is required.	
FAA 420 Directing	2 hours
A study of the fundamentals of staging, blocking, movement, stage business, tempo, script analysis, casting, and rehearsal planning. The course includes preparation of a prompt book for a one-act play to be directed for public performance. <i>Prerequisite: FAA 220.</i>	
FAA 477 Senior Seminar	2 hours
This course is a review of the fine arts concentrating upon the student's area of emphasis.	
FAA 481 Methods and Materials in Teaching Elementary School Music	2 hours
The aims and values of elementary school music will be studied, opportunities to develop teaching techniques will be provided, and introductions to standard materials will be made. (Required of all students concentrating in Elementary Education.)	
FAA 487-488 Independent Study	2-4 hours
FAA 490 Senior Project	2-8 hours
Recommended to begin during the second semester of the junior year.	

Foreign Languages

Aims

To familiarize students with the language and literature of the French, German, and Spanish speaking peoples; to help students understand a culture other than their own; and to assist students in preparing for careers requiring foreign language skills. The program also provides students interested in research with a reading knowledge of a foreign language, and it helps travelers to foreign countries acquire basic conversation skills.

Requirements for Field of Concentration in French, German, or Spanish

A minimum of 28 hours in the target language (not including French 110, 120, 230; German 110, 120, 230; or Spanish 110, 120, 230) plus Foreign Language 425, and a Senior Project. Required are at least one conversation course (240 or 241), one literature course (351, 352, 357, or 358), and one civilization course (310, 311, 312 or 313). Related course requirements are Interdisciplinary Studies 251 and 252. All students are expected to spend a minimum of one semester studying in a country where their target language is spoken. Students planning to teach a foreign language must complete FL 480 and 481.

Foreign Language majors should consider developing a strong second field in an area related to career goals and acquiring a working knowledge of an additional foreign language.

Only students who have completed the following courses or their equivalents will be recommended for state certification to teach French, German or Spanish in secondary school. French - major: Fr. 110, 120, 230, either 240 or 241, 313, either 351 or 352. F.L. 425, 480 and any other four hours of French. German - major: Ger. 110, 120, 230, either 240 or 241, 312, 351 or 352. F.L. 425, 480 and any other four hours of German. Spanish - major: Sp. 110, 120, 230, either 240 or 241, 310 or 311, 357 or 357. F.L. 425, 480 and any other four hours of Spanish. Students must also complete the requirements for certification in grades 5—8 for their respective language. See the Education Department listings for required Professional Education courses.

French

Fr. 110 French I

4 hours

This is the first of three courses emphasizing the acquisition of French language skills needed to satisfy basic social requirements in French-speaking countries. Elementary listening, speaking, reading, and writing needs are addressed, as well as an introduction to French cultures and issues. (Oral practice sessions are required. French I is intended primarily for students who have no acquaintance with the language.)

Fr. 120 French II

4 hours

The second of three courses: See French 110. *Prerequisite: Fr. 110 or equivalent.*

Fr. 230 French III

4 hours

The third of three courses: See French 110. *Prerequisite: Fr. 120 or equivalent.*

Fr. 240 Conversation and Composition: The Living Language

4 hours

French and American life styles are compared through discussions and compositions designed to improve the student's communication skills in French. *Prerequisite: Fr. 230 or equivalent.*

Fr. 241 Conversation and Composition: Francophone World

4 hours

While improving skills of spoken and written communications in French, the student becomes acquainted with contemporary issues in the French-speaking world. *Prerequisite: Fr. 230 or equivalent.*

Fr. 313 France

4 hours

An introduction to France, with special attention to its political and cultural history, contemporary institutions, activities, customs, and values. Cross-cultural comparisons and contrasts of France and the United States are included.

Fr. 351 Survey of French Literature I

4 hours

A survey of French literature from the earliest periods to the end of the 18th century. Readings in French from an anthology and certain reference works. Conducted in French. *Prerequisite: Fr. 230 or equivalent.*

- Fr. 352 Survey of French Literature II** 4 hours
A survey of French literature of the 19th and 20th centuries. Introduction to *explication de texte* techniques. Readings in French from an anthology and certain reference works. Conducted in French. *Prerequisite: Fr. 230 or equivalent.*
- Fr. 410 Topics in French Literature** 2 or 4 hours
An advanced literature seminar which highlights major literary movements, genera, and themes from the French-speaking world. *Prerequisite: Fr. 351 or 352.*
- Fr. 487-488 Independent Study** 2 or 4 hours
- Fr. 490 Senior Project** 2-8 hours

German

- Ger. 110 German I** 4 hours
This is the first of three courses emphasizing the acquisition of German language skills needed to satisfy basic social requirements in the German-speaking countries. Elementary listening, speaking, reading, and writing needs are addressed, as well as an introduction to German culture and issues. (Oral practice sessions are required. German I is intended primarily for students who have no acquaintance with the language.)
- Ger. 120 German II** 4 hours
The second of three courses: See German 110. *Prerequisite: Ger. 110 or equivalent.*
- Ger. 230 German III** 4 hours
The third of three courses: See German 110. *Prerequisite: Ger. 120 or equivalent.*
- Ger. 240 Conversation and Composition I** 4 hours
A discussion of life in Germany. Designed to improve communication skills. Brief oral and written reports. *Prerequisite: Ger. 230 or equivalent.*
- Ger. 241 Conversation and Composition II** 4 hours
The course is designed to improve skills of spoken and written communication in German through a focus on contemporary problems. *Prerequisite: Ger. 230 or equivalent.*
- Ger. 302 German Business Correspondence** 2 hours
The course is designed to prepare students for possible employment in German-American firms through the development of skills in business letter writing and familiarization with German technical terms in business and banking. *Prerequisite: Ger. 230 or equivalent.*
- Ger. 312 German Civilization** 4 hours
The course is designed to acquaint the student with the history, culture, and people of the German speaking countries: the two Germanies, Switzerland and Austria.
- Ger. 351 Survey of German Literature I** 4 hours
A survey of German literature from the earliest periods to the beginning of the 19th century. Readings in German from an anthology. Conducted in German. *Prerequisite: Ger. 230 or equivalent.*
- Ger. 352 Survey of German literature II** 4 hours
A survey of German literature from the Romantic period to the present. Readings in German from an anthology. Conducted in German. *Prerequisite: Ger. 230 or equivalent.*
- Ger. 410 Topics in German Literature** 2 or 4 hours
An advanced literature seminar which highlights major literary movements, genera, and themes from the German-speaking world. *Prerequisite: Ger. 351 or 352.*
- Ger. 487-488 Independent Study** 2 or 4 hours
- Ger. 490 Senior Project** 2-8 hours

Spanish

Span. 110 Spanish I 4 hours

This is the first of three courses emphasizing the acquisition of Spanish language skills needed to satisfy basic social requirements in Spanish-speaking countries. Elementary listening, speaking, reading, and writing needs are addressed, as well as an introduction to cultures and issues. (Oral practice sessions are required. Spanish I is intended primarily for students who have no acquaintance with the language.)

Span. 120 Spanish II 4 hours

The second of three courses: See Spanish 110. *Prerequisite: Span. 110 or equivalent.*

Span. 230 Spanish III 4 hours

The third of three courses: See Spanish 120. **Prerequisite: Span. 110 or equivalent.**

Span. 240 Conversation and Composition: Spain 4 hours

An intensive training in spoken and written Spanish with emphasis on current events in Spain. Oral reports are based on readings from newspapers, magazines, and literary works. *Prerequisite: Span. 230 or equivalent.*

Span. 241 Conversation and Composition: Spanish America 4 hours

An intensive training in spoken and written Spanish with emphasis on current events in Latin America. Oral reports are based on readings from newspapers, magazines, and literary works. *Prerequisite: Span. 230 or equivalent.*

Span. 310 Spanish American Civilization 4 hours

A study of the development of Latin America from the pre-Columbian era to the present day in art, music, drama, history, and literature. Each student does research on a specific project selected in consultation with the instructor. Conducted in English.

Span. 311 Spanish Civilization 4 hours

An examination of Spain's influence on the history, art, music, drama, literature, and science of the world. Each student does research on a specific project selected in consultation with the instructor. Conducted in English.

Span. 357 Literature of the Hispanic World I 4 hours

An introduction to artistic, historical, and etho-social aspects of the Spanish-speaking world through its literature. Literary genera, figures, and other aesthetic elements are examined. Conducted in Spanish. *Prerequisite: Sp. 230 or equivalent.*

Span. 358 Literature of the Hispanic World II 4 hours

A study of the artistic, historical, and etho-social aspects of the Spanish-speaking world through its literature. Literary genera, figures, and other aesthetic elements are examined. Conducted in Spanish. *Prerequisite: Sp. 230 or equivalent.*

Span. 410 Topics in Spanish and Spanish American Literature 2 or 4 hours

An advanced literature seminar which highlights major literary movements, genera, and themes from the Spanish-speaking world. *Prerequisite: Sp. 357 or 358.*

Span. 487-488 Independent Study 2 or 4 hours

Span. 490 Senior Project 2-8 hours

Japanese

Jpnse. 110 Japanese I 4 hours

This is the first of two courses introducing the Japanese language and highlighting basic speaking and comprehension skills. Cultural issues also are presented. (Oral practice sessions are required.)

Jpnse. 120 Japanese II 4 hours

The second of two courses. See Jpnse 110. *Prerequisite: Jpnse. 110 or equivalent.*

Foreign Language

F.L. 425 Introduction to Linguistics **2 hours**
A study of basic concepts and terminology of linguistics. Required of all majors in the department.

F.L. 480 Methods and Materials in Teaching Foreign Languages **2 hours**
A study of the methods, teaching materials, lesson planning, and extracurricular activities necessary for the teacher of French, German, or Spanish as a foreign language. (May be taken for credit as Education 480.)

F.L. 481 Foreign Languages for Middle Childhood **2 hours**
Methods, teaching materials, lesson planning, and extracurricular activities necessary for the middle childhood teacher of French, German, or Spanish as a foreign language. Special emphasis on aural-oral teaching techniques and characteristics of the transescent language learner.

F.L. 487-488 Independent Study in Foreign Languages **2 or 4 hours**

Freshman Seminar

Fr. Sem. 111 **4 hours**
An examination of specialized topics in a seminar setting. Emphasis is given to the development of writing and critical thinking skills, practice in individual and group research, and application of oral communication skills. Attention is also given to orientation to the Bethany program, college life, and academic advising. Required of entering Freshmen in the first semester.

Sec. A The Human Struggle Through Sport
This seminar explores the impact of sport on society and self. In it students examine the social and psychological effects on participants in and consumers of sport through the study of fiction, essays, critical analysis, poetry, and film. Topics include amateurism, competition, aging, professionalism, racism, sexism, the role and impact of the media, sport and education, and the effect of sport on children.

Sec. B Science and Pseudoscience: The Need for Skeptical Inquiry
Surveys of American youth have shown widespread belief in the pseudosciences such as astrology, numerology, biorhythms, clairvoyance, ESP, reincarnation, UFOs, and fringe medicine. Thus, there is need for a structured look at various pseudosciences and how each fails the test for being scientifically valid. The role that pseudoscience has played in the history of science is considered. The limitations of science, even in our modern society, are examined and debated.

Sec. C Entrepreneurial Spirit
This seminar studies the entrepreneurial spirit in America. The dimension of the entrepreneurial spirit is explored through various readings. There will be visits and interviews with local entrepreneurs. Self-administered tests are used to determine the degree to which individual students subscribe to the entrepreneurial spirit. The major focus of the course is a situation in which teams of students start their own business. Finally, students explore opportunities for enterprise while at college.

Sec. D Rock 'n' Roll: From Elvis to the Eighties
A study of youth culture in America as it is shaped by and reflected in rock 'n' roll music. The course focuses on 1) the music as a significant form of cultural expression, and 2) the changes that have taken place in youth culture in America from the fifties through the eighties.

Sec. E The Superpowers in the Nuclear Age
The course explores two basic themes, interrelated and converging: 1) the origins, development, and conduct of the Cold War; and, 2) the development of nuclear weapons and their impact on superpower diplomacy.

Sec. F The Storytelling Tradition

Storytelling types, tales, and techniques are explored in this seminar through readings, discussions, videos, a field trip to a national storytelling festival, and by personal experience in telling. A special fee is assessed to cover the cost of the field trip, approximately \$150.

Sec. G. The Idea of Home

This seminar focuses on the meaning of “home” as an idea and a place. Topics of discussion include leaving home as memory, home as destination, homesickness, homelessness, and exile. Home as a place is examined by exploring the significance of fictional homes, historic homes, celebrity homes, the evil home (haunted house), the home town, and the dream house. Activities include writing assignments and the presentation of a plan and rationale for the student’s dream home.

Sec. H Crime and Punishment

A study of the nature and causes of criminal behavior and crime, followed by an examination of systems of punishment and rehabilitation, constitute the major activity of this course.

Sec. I The Law, Courts, Judges, Lawyers, and Politics

The seminar examines the nature of law, the role of legal actors in the legal system, and the politics of the legal system and the legal process. It examines legal ideas and practice with the goal of making policy recommendations to improve the functioning of the legal system and process. Various ideas as to the nature of law and the role of judges, the role of lawyers and the politics of the Bar, the politics of judicial selection, the instruments of judicial power and the problem of limiting that power, the impact of judicial decisions, and legal ethics are analyzed.

Sec. J The World at Stake?

This course focuses on the world community, the problems it faces, and the increasing interdependency which calls for the involvement of every human being in the quest for solutions. Focus is on issues such as peace and war, human rights, and the environment and the ecosystem.

Sec. K Dragons, Dune, and Darkover: Science Fiction and Society

By examining five science fantasy authors’ universes, students discover the various ideas of social organization each author uses. The authors studied are Anne McCaffery, Marion Zimmer Bradley, L. Neil Smith, Frank Herbert, and Ursula LeGuin. Students compare and contrast each of the five universes in the following areas: government and political ideas, social structure and class, and interaction with the “natural” world.

Sec. L Soap and Stuff

What happens when you make an omelet, bake a cake, make wine, root beer, or beer? What makes candy harden, jelly jell, fudge fudge, or yogurt set? Why can changing the order of addition of ingredients make mayonnaise or a mess? What is a detergent? How do they work? This seminar investigates these and a number of other questions related to everyday items and foods. In the process students learn to prepare some of the dishes and beverages. Group projects demonstrate many of the theories discussed.

Sec. M William Golding and the Problem of Evil

A study of six novels by the 1981 Nobel Prize winner in literature. By analysis and comparison, the seminar seeks to determine what Golding has to say about the nature of man and his problems.

Sec. N Education of the Self

An exploration of three areas considered crucial to personal adjustment and growth: the self-concept, relationships and communication, and a meaningful philosophy of life. Through readings and group discussions, students develop a greater understanding and acceptance of self and others. Students selecting this seminar should be interested in and open to personal growth and should be willing to share their thoughts and feelings about significant topics with the class.

Sec. O The Great Game: The Western Powers in Central Asia (1880-1989)

A study of the intrigues and maneuvers of Russia, China, and Great Britain in Afghanistan, Northern India, and Turkistan. Emphasis is on geopolitical theory and geography of conflict in Central Asia. Students read studies of the area, fiction from the Age of Empire, travelogues, and selected essays and poems. Films such as "Passage to India," "The Man Who Would Be King," and "My Beautiful Laundrette" are shown.

General Sciences

General Sciences is a grouping of courses only. It is not a department and does not offer a field of concentration. It provides a number of programs, many of which are interdisciplinary in nature, designed principally for non-science majors. Some of these courses, however, such as the history of science, are excellent supplements to the college programs of science majors. In addition, special courses are offered for those who are interested in the teaching of science at the secondary school level.

Only students who have completed the following courses or their equivalents will be recommended for state certification to teach General Science in the secondary school: Bio. 100, and four additional Biology hours; Chem. 101, 102; G.S. 201, 202, 480; Physics 201, 202; Ed. 447; C.S. 482; and at least two additional hours from the following: G.S. 101, 209, 210, or C.S. 140. See the Education Department listings for required Professional Education courses.

G.S. 100 Consumer Chemistry 4 hours

A course emphasizing an understanding of chemical concepts relevant to our everyday lives. At the end of this course, a student should be able to analyze and discuss magazine and newspaper articles dealing with the subjects related to chemistry. (This course is designed for non-science students. May be taken for credit as Chemistry 100.)

G.S. 101 Natural Philosophy 4 hours

An examination of man's changing ideas about the universe. Emphasis is placed upon the role of science as a social institution contributing to these changing beliefs.

G.S. 201 Astronomy 4 hours

A non-technical course in descriptive astronomy and cosmology, including such topics as the solar system, stars, galactic systems, telescoping, rocketry, and space travel.

G.S. 202 Physical and Cultural Geography 4 hours

A study of the interactions between environments and human activities over the earth's surface: land, sea and air. A complementary aspect of the course is devoted to place-name geography.

G.S. 209 History and Philosophy of Science 4 hours

A study of some of the major ideas conceived by western man in attempting to comprehend and describe the natural world. (May be taken for credit as Philosophy 353.) *Prerequisite: one year of college level science or permission of the instructor.*

G.S. 210 Science, Technology, and Society 4 hours

An historical examination of the effects of scientific and technological innovations upon various societies, emphasis being placed upon technology and science of the western world since 1850.

G.S. 480 Methods and Materials in Teaching Physical and Life Sciences 4 hours

A study of the aims and methods of teaching the physical and life sciences in the secondary schools. Special attention is given to teaching general laboratory procedures and techniques of teaching. Each of the departments in the physical and life sciences participates in the program. *Prerequisite: 16 hours in one of the physical or life sciences or permission of the instructor.*

G.S. 487-488 Independent Study 2 or 4 hours

Health Science

Aims

The curriculum in Health Science is interdepartmental, providing the opportunity to earn a Bachelor of Science degree for students who have completed accredited allied health certification programs at other institutions.

In addition to the all-college graduation requirements, students in Health Science may choose among three specializations: Science, Management, and Education. These programs are designed to prepare allied health professionals for graduate or professional school, career changes within allied health fields, or management or educational positions in health professions agencies.

Requirements for Field of Concentration

Students admitted to this degree program must have completed an accredited allied health certification in areas such as respiratory therapy, radiology, or a comparable field.

In the *Science* area of specialization, students must complete 44 hours of selected science courses, plus a Senior Project. These courses will include Chemistry 101, 102, 211, and 212; Physics 201 and 202; Mathematics 281; and 16 hours chosen from Biology 100, 167, 180, 343, 440, and 467.

In the *Management* area of specialization, students must complete 42 hours of selected courses, plus a Senior Project. These courses will include Accounting 211 and 212; Economics 111, 200, 280, 286, 287, and 290; Computer Science 140 or 144; Mathematics 281 and 282; and Communications 302.

In the *Education* area of specialization, students must complete 40 hours of selected courses, plus a Senior Project. These courses will include Education 201, 202, 349, 410, 428, and 470, as well as Education 311, 312 and 476. In addition, students will complete Psychology 100, and Sociology 100 and 362.

For course descriptions, see the listings in the respective departments. Further details of the program may be obtained from the Director of the Health Science Degree Program or the Office of the Dean of the Faculty.

History

Aims

To present the origin and development of institutions and ideas; to point out the great traditions that are molding our thought and action today; and to gain a better perspective of our political, economic, cultural, and social life.

Requirements for Field of Concentration

Twelve hours in European history, including History 301-302, 12 hours of American history, including History 201-202. Four hours in political science, four hours in either African or Asian or Latin American history, History 477, and a Senior Project. A related requirement is Interdisciplinary Studies 251 or 252, the other being strongly recommended. Students planning to attend graduate or professional schools should anticipate possible requirements in the areas of foreign language, statistics, accounting, and computer technology.

European and World History

Hist. 101-102 World Civilizations **4 hours each**

A survey of world civilizations and the interactions between the different centers of civilization from the ancient world to the present. Particular emphasis is given to non-Western cultures in Asia, Africa, and the Americas. First semester covers the period from the ancient world to about 1400 A.D. Second semester carries through to the present.

Hist. 297-298 Special Studies in History **2 or 4 hours**

These courses are designed to permit students to study with various faculty members in the department or with visiting instructors or foreign visitors.

Hist. 301-302 Modern European History **4 hours each**

A survey of European civilization from the Renaissance to the present. Second semester begins with 1815.

Hist. 324 Russian History **4 hours**

A survey of the history of Russia from the Middle Ages to the present. Specific topics include the growth of Russian power, the emergence of Russia as a major player in the European state system, the transition from Czarist autocracy to Soviet totalitarianism, and the impact of the Soviet Union's role as superpower, both internally and externally.

Hist. 327 British History **4 hours**

A survey of British society to the Elizabethan period followed by a more detailed study of the Elizabethan period through World War II. Topics such as the nature of the 18th century politics, the Industrial Revolution, liberal and Victorian England, the impact of the World Wars on British society, and the "Irish Question" are examined.

Hist. 351 Ancient Near Eastern Civilization **4 hours**

This course introduces the student to the historical development of life, culture, and religions of Mesopotamia, Egypt, and the Syro-Phoenician coast, including international relations from pre-history to Alexander the Great. (May be taken for credit as Religious Studies 351.)

Hist. 353 Hellenistic Civilization **4 hours**

An introduction to the Graeco-Roman Oriental world based on a survey of social and cultural developments from Alexander the Great to Julius Caesar. (May be taken for credit as Religious Studies 353.)

Hist. 381 History of the Middle East and North Africa **2 hours**

An historical survey of the rise of the Islamic empires from the time of the Prophet, including the Caliphates, the classical period of Islam, and the Ottoman rule to the end of World War II.

Hist. 382 Cultural Life in the Middle East and North Africa **4 hours**

A study of the cultural developments and impact of Islamic civilization, including religion, art, literature, philosophy, and law.

Hist. 428 The Middle Ages **4 hours**

A study of the decline of ancient civilization, the Byzantine and Islamic cultures, and especially the development of Western Europe to the 14th century.

American History

Hist. 201-202 U.S. History

4 hours each

A survey of the political, economic, and social growth of America. First semester covers the period of exploration to 1865; second semester from 1865 to the present.

Hist. 225 West Virginia History, Government, and Geography

2 hours

The history of the western section of Virginia to the Civil War and the history and government of West Virginia to the present. The physical, political, and social geography of the state is included. Field trips to various sections of the state are included as part of the course.

Hist. 288 The American Political Novel

2 hours

An examination of the political life in the United States at the municipal, state, and federal level as reflected in a number of political novels since 1932. The course examines *Grapes of Wrath*, John Steinbeck; *It Can't Happen Here*, Sinclair Lewis; *All the King's Men*, Robert Penn Warren; *The Last Hurrah*, Edwin O'Connor; and *Advise and Consent*, Alan Drury, plus an additional book selected for each student. (May be taken for credit as Politics and Public Policy 288.)

Hist. 341 Development of the American Nation

4 hours

A history of the United States from 1816 to 1861. Considers growth of American nationalism and sectionalism following the War of 1812, the rise of Jacksonian Democracy, territorial expansion, and the coming of the Civil War.

Hist. 342 Age of Big Business

4 hours

A political, social, and economic history of the U.S. from 1865 to 1914. Emphasis is placed on the growth of industrialism during this period and the resulting attempts at social reform.

Hist. 423 Contemporary U.S. History

4 hours

The history of the United States since 1945. The course will include a brief review of the Progressive Era, the 1920s and the New Deal. Films, records, contemporary magazines, scholarly journals, and newspapers are used in addition to the textbooks.

Hist. 426 Latin America

4 hours

A study of the geography, politics, social composition, economic structure, history, and problems of Latin America.

Hist. 465 Constitutional Law

4 hours

A study of the judicial elaboration and interpretation of the U.S. Constitution. A case study approach to the historical development of American constitutional principles. (May be taken for credit as Politics and Public Policy 465.)

Hist. 477 Historical Writings and Methods

2 hours

A study of the major works of the ancient, medieval, and modern European and American historians with emphasis on the various schools and methods of interpretation. The student also receives an introduction to the nature and methods of history as an intellectual discipline. Emphasis is placed on the technique of historical research, and the art of expression and critical analysis.

Hist. 487-488 Independent Study

2 or 4 hours

Hist. 490 Senior Project

2-6 hours

Begins first semester of the senior year.

Interdisciplinary Studies

Aims

The interdisciplinary studies program recognizes that some students are more likely to achieve the goals of an “integrated education” and a “self-examined life” as set forth in the Bethany Plan through cross-disciplinary fields of concentration. The interdisciplinary studies program facilitates such study by providing the machinery needed for its implementation and evaluation, by aiding students in the study of interdisciplinary methods and problems, by critically evaluating students’ understandings of the methods and materials of various disciplines, and by requiring the students to integrate the knowledge of materials and methods derived from various disciplines around a single problem or idea.

Requirements for Field of Concentration

The interdisciplinary studies department coordinates faculty-sponsored and student-initiated programs of study that cross departmental lines. The initiator of an interdisciplinary field of concentration is responsible for establishing and justifying its goals and curriculum. The program must include at least 24 hours (excluding the Senior Project), but may not exceed 72 hours. No more than 48 hours in any one department will be counted toward graduation. Each proposed interdisciplinary field of concentration must be approved by the faculty Interdisciplinary Studies Committee. All work is supervised by the Director of Interdisciplinary Studies who serves as the students’ academic advisor throughout the program of study.

Admission to the Interdisciplinary Studies Program

All proposals for admission to the program should be submitted to the Director on or before the last day of the last semester of the student’s sophomore year. Students who apply after this date may find that it will take them an extra summer or an extra semester to meet all requirements for graduation. Students will normally be denied admission to the program if they apply after mid-term of their fifth semester.

All proposals must follow the guidelines of the Interdisciplinary Studies Committee and be accompanied by proper supporting documents.

All proposals should be prepared in consultation with the director of interdisciplinary studies.

Senior Year

Senior Comprehensive Examination: Students must have completed at least 24 hours of study in their special curriculum (including all courses designated as required in the original proposal) before they are eligible to take the examination.

The Senior Comprehensive Examination will be designed to measure the student’s grasp of methods and materials basic to the disciplines emphasized in the core curriculum; to test the student’s capacity for integrating materials and methods from the various disciplines; and to allow the student to evaluate the success of the special curriculum in light of his or her stated goals.

Senior Project: Students who wish to do 4-8 hour Senior Projects must have their projects approved by the Director on or before the last day of the last semester of their junior year.

Faculty Initiated or Departmentally Sponsored Interdisciplinary Programs

Education and Psychology

Information is available from the Education Department or the Psychology Department.

Graphics Design

Information is available from the Department of Fine and Applied Arts.

I.S. 100 Origins of Western Thought III: The Modern World

4 hours

An exploration of the modern world and its origins and stresses the basic ideas, historical events, aesthetic styles and primary writings which have shaped the modern world. (Must be taken in the first year by all new freshmen and by all transfer students who matriculate as freshmen or sophomores.)

I.S. 201 World Hunger: The Quest for Survival

4 hours

An examination of the problems of world food resources, production and distribution. Special emphasis will be placed on inequalities between the have's and the have-not's, the effects of malnourishment on human behavior and on social and political conditions, and alternative technological and political solutions to the problem. *Not open to Freshmen.*

I.S. 202 Energy: The World Crisis

4 hours

An analysis of energy resources and needs of the modern world in historical and geographical context. Psychological, social, and political ramifications are examined and alternative solutions to energy problems are evaluated. *Not open to Freshmen.*

I.S. 203 International Terrorism

4 hours

A study of the origins, nature, cost, containment, and prevention of terrorism, violence, and revolution in today's world, focusing in particular on the reasons why many nations and peoples outside the ruling classes of the major developed nations turn to violence. *Not open to Freshmen.*

I.S. 204 Our Sexuality: A Global Perspective

4 hours

An examination of issues concerning sexuality and sexual functioning around the world. Considered are the following topics: biological, psychological, and sociological aspects of sexuality; the development of sex roles; sexual myths; sexuality and religion; birth control; changing sex roles in today's world.

I.S. 210 The Origins of Life

4 hours

An exploration of answers to the question, "What is the probability that we, as humans, will encounter other life forms in the universe?" Emphasis is on the physical conditions necessary for the origin of life forms in the universe, particularly with respect to the origin of life on Earth. The history of ideas and concepts related to this question and a review of current theories and experimental work in this area are covered. The economic, philosophical and attitudinal impact of this question on today's society is examined. This course is designed for those majoring in the Social Sciences and the Humanities, although it may be taken by those majoring in the Sciences. Appropriate laboratory experiences and demonstrations will be an integral part of the course. *Not open to Freshmen.*

I.S. 241 Multi-National Corporations and the Third World

4 hours

An examination of the structure, operations, and political and economic impact of U.S. multinational corporations. Particular emphasis is on the activities of these corporations in third world nations. Problems of developing nations are also considered.

I.S. 251 Origins of Western Thought I: The Ancient World

4 hours

An examination of ideal behavior as it emerges from and influences political, religious, scientific, philosophical, artistic, social and economic activity, and thought from early Greece to the fall of Rome. *Not open to Freshmen.*

I.S. 252	Origins of Western Thought II: The Medieval and Renaissance World	4 hours
An examination of ideal behavior as it emerges from and influences political, religious, scientific, philosophical, artistic, social and economic activity, and thought in the Middle Ages and Renaissance. <i>Not open to Freshmen.</i>		
I.S. 301-302	Heuristics	2 hours
Investigation and discovery of methodologies of problem-solving within a broad spectrum of academic disciplines and pragmatic pursuits. <i>Open to juniors and seniors only. Prerequisite: permission of instructor.</i>		
I.S. 487-488	Independent Study	2 or 4 hours
I.S. 490	Senior Project	4-8 hours

Mathematics

Aims

To provide the general student with a knowledge of the foundations of mathematics; to give the prospective teacher an understanding and appreciation of the fundamental ideas of elementary mathematics; to provide a tool for the technical student; and to give the prospective graduate student a foundation for later study and research.

Requirements for Field of Concentration

The student is required to take the following 24 hours in the department: Math. 201, Calculus I; Math. 202, Calculus II; Math. 203, Calculus III; Math. 354, Linear Algebra; Math. 400, Abstract Algebra; Math. 401, Advanced Calculus.

The student also must complete a Senior Project. In addition, each student must complete one of the following tracks:

Mathematics: CS 142, 143, or 201; twelve hours from the following: Math. 326, 341, 344, 390, 383, 384.

Mathematics-Economics: Math. 231, 281, 282; Acct. 211; Eco. 200, 301, 302; CS 144 or 145.

Mathematics-Physics: Math. 341; Physics 201, 202, 251 or 261, 300; CS 142 or 143.

Mathematics-Computer Science: CS 201, 202, 290, 390; Math. 341.

Mathematics-Education: Math 103 (or high school equivalent), 104 (or high school equivalent), 201, 202, 203, 250, 281, 326, 354, 400, 401, 480; CS 140 or 201.

Only students who have completed the Mathematics-Education track will be recommended for state certification to teach mathematics in secondary school. See the Education Department listings for required Professional Education courses. Students must also complete the requirements of Mathematics MCE 5—8.

Math. 103	College Algebra	4 hours
The course prepares the student to take Calculus I and examines sets and operations on sets, numbers systems, solutions to equations, inequalities, functions and graphing, conic sections, synthetic division and the remainder theorem, exponential and logarithm functions, computation with common logarithms. (May not be taken if credit has been earned for Math. 201.)		

Math. 104 Trigonometry **2 hours**

A study of radian measure, trigonometric functions and their graphs, fundamental identities, conditional trigonometric equations, inverse trigonometric functions, vectors, complex numbers, trigonometric form of complex numbers, and DeMoivre's Theorem.

Math. 141 Mathematics for the Liberal Arts Student **4 hours**

An introduction for the non-science major to the spirit and flavor of mathematics. Stresses fundamental concepts with the aim of clarifying the importance of mathematics in relation to other branches of knowledge. Topics that may be covered include sets, logic, the number concept, history of mathematics, the nature and use of geometry, computers, computer programming, and logical puzzles.

Math. 152 Finite Mathematics **4 hours**

This course is intended primarily for students of the biological or social sciences. It is also recommended for non-science majors desiring an acquaintance with mathematics. It is not a pre-calculus course. Concepts studied include logic, set theory, matrices, probability theory, linear programming, and game theory.

Math. 201 Calculus I **4 hours**

A study of real number system, equations of a line, study of the circle and parabola, functions, limits, and continuity, as well as techniques of differentiation and integration applied to maximum and minimum problems and to related rates. *Prerequisite: 3½ years of high school math, Math. 103, or permission of the instructor.*

Math. 202 Calculus II **4 hours**

An examination of the area between two curves, volumes of revolution, moments, centroids, hydrostatic pressure, and work. Integration and differentiation of transcendental functions. Methods of integration including integration by parts, partial fractions, and trigonometric substitution. Polar coordinates and graphs, area, and angles of intersection in polar coordinates. *Prerequisites: Math. 104 or high school equivalent; and Math. 201 or advanced placement.*

Math. 203 Calculus III **4 hours**

Intermediate calculus with emphasis on vector methods and functions of several variables, scalar and vector products, partial differentiation and applications, directional derivative and gradient, multiple integrals with physical applications, expansion of functions, L'Hopital rule, sequences, and series. *Prerequisite: Math. 202.*

Math. 210 Discrete Structures **4 hours**

The fundamental algebraic, logical, and combinational concepts of computer science. Topics include graph theory, monoids and finite automata, lattices, and Boolean algebras.

Math. 231 Quantitative Methods in Management **2 hours**

This course deals with applications of matrix algebra to business and economics, including problems involving cost minimization and profit maximization. (The necessary matrix algebra will be developed in the course. Primarily designed for students who intend to pursue a career in business.) *Prerequisite: Math. 103 or equivalent.*

Math. 250 Mathematics for Early and Middle Childhood **4 hours**

A course designed in content and teaching style for early and middle childhood pre-service teachers. The course will emphasize active student participation and a field placement component which will permit the students to develop materials and evaluation instruments as well as practice the teaching of mathematics concepts including the structure of the number systems, real number properties and the computation derived from them, problem solving strategies, and geometry and measurement. (Required for Middle Childhood.) *Prerequisite: permission of the instructor. Not open to Freshmen.*

Math. 281 Statistical Methods I **4 hours**

An introduction to statistical analysis including frequency distribution and graphic presentation of data, measures of central tendency, relative positions in a distribution, variability, the normal curve and its applications, correlation and regression, probability and statistical inference, testing differences between means, and analysis of variance. (Not open to students in the general program.)

Math. 282 Statistical Methods II	2 hours
A study of statistics including testing goodness of fit, contingency tables, regression and correlation analysis, analysis of variance, and non-parametric methods.	
Math. 326 Introduction to Modern Geometry	4 hours
An introduction to Euclidean and non-Euclidean geometries and synthetic projective geometry, the concept of limit and infinity, geometrical constructions, and recent developments and theorems. <i>Prerequisites: Math. 201, 202, or permission of the instructor.</i>	
Math. 341 Differential Equations	4 hours
A study of the methods of solution of ordinary and partial differential equations and applications to the physical sciences. <i>Prerequisite: Math. 202.</i>	
Math. 344 Complex Variables	2 hours
A study of complex numbers, elementary functions, analytic functions, contour integration, Taylor and Laurent series, conformal mapping, boundary value problems, and Laplacian equations. <i>Prerequisite: Math. 203.</i>	
Math. 354 Linear Algebra	4 hours
A study of geometric vectors, matrices and linear equations, real vector spaces, linear transformations and matrices, and inner product spaces.	
Math. 383 Probability & Statistics I	4 hours
An introduction to probability, basic distribution theory, limit theorems, mathematical expectation, probability densities, random variables, sampling distributions, point and interval estimation, tests of hypotheses, regression and correlation, and analysis of variance. <i>Prerequisite: Math. 202 or permission of the instructor.</i>	
Math. 384 Probability & Statistics II	2 hours
The application of the concepts of probability to statistical procedures such as sampling estimations, tests of hypothesis, regression theory, and Bayesian methods. <i>Prerequisite: Math. 383.</i>	
Math. 390 Numerical Analysis	4 hours
A study of numerical methods in evaluating integrals and differential equations, techniques in finding the roots of polynomials, solving systems of linear equations and matrix manipulation. <i>Prerequisites: CS 142, 143 or 201 and Math. 201, 202. (May be taken for credit as Computer Science 390.)</i>	
Math. 400 Modern Abstract Algebra	4 hours
A study of groups, rings, integral domains, fields, and vector spaces.	
Math. 401 Advanced Calculus	4 hours
A study of the Jacobian, Lagrange multipliers, limits and continuity, completeness of the Real numbers, sequences, series, Fourier series and orthogonal functions, partial differential equations, and Implicit Function Theorem. <i>Prerequisite: Math. 203.</i>	
Math. 478 Senior Seminar	2 hours
An examination of the historical development and cultural significance of mathematics. A study of modern trends in mathematical thought and application as revealed in the literature. An analysis of career opportunities in mathematics.	
Math. 480 Methods and Materials in Teaching Mathematics	2 hours
A study of the approved methods in teaching mathematics at the secondary level; class period activities of the teacher; procedures and devices in teaching; organization of materials, testing, aims, and modern trends. (May be taken for credit as Education 480.)	
Math. 487-488 Independent Study	2 or 4 hours
Math. 490 Senior Project	2-8 hours.

Philosophy

Aims

To assist the student in discovering and developing sound bases for interpreting self and society through a careful examination of his or her beliefs, actions, and claims to knowledge; to assist the student in becoming aware of the nature and status of philosophical problems, commitments, ideologies, and models that serve as the foundation of human life; and to provide the student who expects to pursue graduate studies in philosophy with a sound basis in the major areas of the field.

Requirements for Field of Concentration

Concentration in philosophy may hold promise for several students as one way to achieve a liberal education. For others, philosophy may be an important related field; or it may serve as a good foundation for those planning for graduate work in another field as well as for those who are professionally interested in philosophy.

Concentration in philosophy requires satisfactory completion of a minimum of 24 hours, including Philosophy 123, 124, 323, 324, 325, plus a Senior Project, and Senior Comprehensive Examination. The Senior Project is received and evaluated in the final semester of the student's academic program. Related requirements are Interdisciplinary Studies 251, 252.

The student who is considering graduate work should be aware that many good graduate programs in philosophy require a reading knowledge of French and German.

Phil. 100 Introduction to Philosophy

4 hours

This course is designed primarily to involve students in an introductory exploration into the range of problems with which philosophers wrestle. "Living issues" confront us in such vital areas as the nature of self, man, mind, values, knowing, freedom, and of philosophy, philosophic outlooks, and religious traditions.

Phil. 123 Basic Logic

4 hours

Students are assisted in developing the ability to recognize the differences between emotional intensity and valid argument, between verbal disputes and conclusions that follow (logically) from premises. Recognition of the bases of these differences and development of the very practical abilities to recognize, construct, and analyze various forms of argument and to detect logical errors (fallacies) are important objectives of the course.

Phil. 124 Ethics: Personal and Social

4 hours

An examination of different personal and social foundations upon which ethics or morals can be (and have been) built, such as pleasure, happiness, feeling, reason, obligation, usefulness, and relativism; significant moral problems in several areas of life and work; and basic criteria for moral decision-making.

Phil. 250-259 Special Topics in Philosophy

2 or 4 hours

Phil. 252 Philosophy of Mysticism

4 hours

An examination of what is involved in the experience and claims of several mystical groups or representatives, from ancient to contemporary times. The course will emphasize trying to understand the basic claims that mystics make, assessing the kinds of certainty, truth and insight claimed, and exploring the place of "the mystical" in human experience. (Offered in alternate years.)

Phil. 254 Contemporary Ethical Issues 4 hours

An orientation to the relatively new attitude toward normative ethical issues; identification and examination of key normative concepts and principles (e.g., honesty, fidelity, loyalty, obligation, autonomy, dependence, paternalism, freedom, justice, self-respect and dignity, and rights) and problems that cut across several areas of social and professional life; and exploration of how these concepts and principles are involved in attempts to solve moral problems in the domains of social life and vocational life in, e.g., public policy, business, and mass communications. (Offered in alternate years.)

Phil. 323 Ancient and Medieval Philosophy 4 hours

This course begins with the seventh century B.C. Greek mythic interpretations and moves through early Nature Philosophies, Scepticism, Greek Humanism, the Golden Age, the Roman Period, and the relationship of religion and philosophy in the Medieval Period. (Offered in alternate years.)

**Phil. 324 Modern Philosophy:
From the Renaissance Through the 19th Century 4 hours**

This course begins with the New Learning and moves through the rise of “the scientific spirit,” the development of British Empiricism and Continental Rationalism, Kant’s “revolutionary” impact on philosophy, and the major thought forms of the 19th century. (Offered in alternate years.)

Phil. 325 Twentieth Century Philosophies 4 hours

A survey of the dominant philosophic forms from Bergson, Dewey and Whitehead through the rise of realism, logical analysis, phenomenology-existentialism, and language studies. (Offered in alternate years.)

Phil. 350-359 Advanced Topics in Philosophy 2 or 4 hours

Phil. 352 Natural Philosophy 4 hours

An examination of man’s changing ideas about the universe. Emphasis is placed upon the role of science as a social institution contributing to these changing beliefs. (Offered in alternate years. May be taken for credit as General Sciences 101.)

Phil. 353 History and Philosophy of Science 4 hours

A study of some of the major ideas conceived by western man in attempting to comprehend and describe the natural world. *Prerequisite: one year of college level science or permission of the instructor.* (Offered in alternate years. May be taken for credit as General Sciences 209.)

Phil. 355 Philosophy of Religion 2 or 4 hours

An examination of the major aspects of religion from a philosophic perspective. Study will include the religious experience, the meaning and significance of faith, belief and criteria, knowledge, proof, evidence and certainty, concept of deity, and scope and impact of religion in human life. (Offered in alternate years.)

Phil. 358 Aesthetics, The Arts, and Philosophy 2 or 4 hours

An examination of the nature of aesthetic experience and its relation to other kinds of experience, as well as its place in art production, appreciation and creativity; the notion of “a work of art”; language used in description, interpretation, and evaluation of art; and different interpretations of aesthetics. Opportunities are provided for giving special attention to particular art areas as well as to “the Arts.” (Offered in alternate years.)

Phil. 477-478 Senior Seminar 2 hours

This seminar seldom consists of a general review of all areas of philosophy; the topic or particular area of study is chosen as a result of student and faculty conferences. Student ability, interest, and need are important factors. *Conferences with and permission of the head of the department are required before enrollment.*

Phil. 487-488 Independent Study 2 or 4 hours

Phil. 490 Senior Project 2-8 hours

Physical Education

Aims

To enhance the health of the student; to provide opportunities for students to participate and develop proficiency in sport activities; and to prepare students for careers in physical education.

Requirements for Field of Concentration

A minimum of 34 hours in the department, which must include PE 110, 210, 225, 226, 230, 231, 243, 244, 340, 426, 427, 480, and 481 or their equivalents, plus a Senior Project. Students must also take Bio. 100 and 167, Sp. Education 205, F&AA 225, and the Professional Education sequences.

1. To be recommended for state certification, K-12 students must complete the requirements for the field of concentration and choose 2 hours from either P.E. 301 or 302 and 2 hours from either 309 or 355.
2. To be recommended for state certification, 5-8 students must complete the requirements for endorsement and a second field is required.

P.E. 100-165 Physical Education Performance Courses 1 hour each

These courses examine skills in performances; knowledge of strategies, rules, equipment, and methods; participation in forms of sport. (Activity course: CR/NCR only. Exception: P.E. 110 must be taken for a letter grade by students pursuing the Physical Education field of concentration.)

P.E. 110 Aquatics (Advanced Life Saving)	P.E. 155 Varsity Football
P.E. 135 Tennis - Badminton	P.E. 156 Varsity Golf
P.E. 139 Physical Fitness	P.E. 157 Varsity Soccer (M)
P.E. 150 Varsity Baseball	P.E. 158 Varsity Swimming (M&W)
P.E. 151 Varsity Basketball (M)	P.E. 161 Varsity Track (M&W)
P.E. 152 Varsity Basketball (W)	P.E. 162 Varsity Volleyball
P.E. 153 Varsity Cross Country (M&W)	P.E. 163 Varsity Softball
P.E. 154 Varsity Field Hockey	P.E. 164 Varsity Soccer (W)

P.E. 167 Introduction to Mammalian Anatomy and Physiology 4 hours

The study of mammalian anatomy as exemplified in the cat. Discussion and study of the functioning of the tissues and organ systems of the human body; lab study of the anatomy of the cat; human physiology. (Not open to students majoring in Biology. May be taken for credit as Biology 167.)

P.E. 210 Aquatics: WSI 1 hour

This course emphasizes swimming skills leading to Water Safety Instructor's certification. (Activity course: CR/NCR only. Exception: must be taken for a letter grade by students pursuing the Physical Education field of concentration.)

P.E. 225 Health Education for Children 2 hours

A study of aspects of health applicable to children in elementary and middle schools.

P.E. 226 First Aid as Related to the Principles of Biology 2 hours

This course emphasizes the biological principles in the standard first aid and personal safety course of the American Red Cross. Red Cross certificates may be earned by those passing the examination. Opportunity for instructor's certificates will be presented as an option at the end of the course. (May be taken for credit as Biology 105.)

- P.E. 230 Lab Analysis: Team** **2 hours**
This course emphasizes skill development and analysis and cognitive acquisition of rules, equipment, strategies, and methods. Sports covered include soccer, volleyball, field hockey, football, basketball, and softball.
- P.E. 231 Lab Analysis: Individual** **2 hours**
This course emphasizes skill development and analysis and cognitive acquisition of rules, equipment, strategies, and methods. Sports covered include archery, badminton, dance, golf, tennis, track and field, and gymnastics.
- P.E. 243 Socio-Psychological Perspective** **4 hours**
A consideration of small sport groups as micro-social systems; application of group dynamics theory and small group research to the study of sport groups; investigation of the influence of group member characteristics, environmental factors, interpersonal relations, and group structural characteristics on individual member adjustment and group effectiveness. Designed to investigate those aspects of psychology which influence the performance and the participant in sport. Additional factors such as motives, arousal, aggression, and other socio-psychological variables will be covered.
- P.E. 244 Philosophical-Historical Perspective** **4 hours**
A philosophical inquiry into physical education. Consideration is given to a general philosophical interpretation of the nature and purpose of physical education and review of the historical and philosophical changes in American education with emphasis on the developing roles of professional physical education.
- P.E. 300-308 Clinics** **2 hours each**
These courses prepare students to teach particular sports at any level within the school environment. Emphasis is on the theory of the sport and on methodologies for teaching it.
- P.E. 301 Football, Basketball, Baseball, and Softball**
- P.E. 302 Soccer, Volleyball, and Track and Field**
- P.E. 309 Intramural Sports** **2 hours**
A study of the organization, administration, and objectives of the intramural athletic programs.
- P.E. 340 Prevention and Care of Injuries** **2 hours**
An examination of common hazards of play and athletics, and preventive measures and treatment of injuries. Red Cross First Aid Certificate may be earned by those who pass the examination. *Laboratory fee: \$30.*
- P.E. 341 Advanced Athletic Training** **4 hours**
Major emphasis is placed on those skills needed by personnel involved in the field of sports medicine. Orthopedic evaluations of injuries, treatment of crisis situations, and study of conditioning and rehabilitation programs will be covered. *Prerequisites: P.E. 340, 426, 427. Laboratory fee: \$30.*
- P.E. 355 Coaching Sport** **2 hours**
An examination of the basic philosophy and principles of athletics as integral parts of physical education and general education. State, local, and national regulations and recommendations related to athletics; legal considerations; function and organization of leagues and athletic associations; personal standards and responsibilities of the coach as a leader; public relations; general safety procedures; general principles of budgets, records, purchasing, and facilities.
- P.E. 426 Kinesiology** **2 hours**
An examination of anatomy and mechanics as applied in the study of the human body during physical exercise, with special emphasis on the analysis of motion in specific sports skills and exercise patterns. *Prerequisite: Biology 167.*
- P.E. 427 Physiology of Muscular Activity** **2 hours**
An examination of anatomy and physiology as applied in the study of the human body during physical exercise, with special emphasis on the application of physiological variables in specific sports skills and exercise patterns. *Prerequisite: Bio. 167.*

- P.E. 480 Teaching Physical Education** **4 hours**
 An analysis of current methods, materials, and techniques pertinent to teaching and administering physical education and athletics. Development of an understanding of the formative and summative evaluation process in the cognitive, affective, and psychomotor domains of physical education. Emphasis is given to data-collection techniques (measurement), data-manipulation (statistics), data evaluation, and data interpretation in view of teaching. Integration of administrative processes and techniques with teaching and evaluation.
- P.E. 481 Elementary School Physical Education** **2 hours**
 A study of teaching physical education at the elementary level. A study of this age group's physical, motor, social and emotional development, plus activities contributing to proper physical development.
- P.E. 487-488 Independent Study** **2 or 4 hours**
- P.E. 490 Senior Project** **2-8 hours**

Physics

Aims

To introduce students to the current body of knowledge expressing the physicist's concepts of the universe and its physical laws; to provide courses serving the needs of liberal arts students who are concentrating in physics or are interested in the physical and life sciences, medicine, optometry, therapy, engineering, or teaching. Students may choose from a variety of courses to satisfy a distribution requirement, to attain enough competence for a future career in a related field, or to attain sufficient breadth and depth to pursue an advanced degree in physics.

Requirements for Field of Concentration

A minimum of 36 hours in the department, including Physics 201, 202, either 221 or 222, 251, 261, 300, 314, 316, 318 and either 305 or 306, plus a Senior Project. Those students expecting to do graduate work are urged to take both 221 and 222 and both 305 and 306.

A combined plan with Case Western Reserve University, Columbia University, a dual-degree program with Georgia Institute of Technology, and a Three-Two Plan with Washington University are available to students interested in various engineering or industrial management degrees. Special programs are offered in cooperation with the Education Department for students interested in meeting the demand for teachers of physics, particularly in upper middle and secondary schools. Only students who have completed the following courses or their equivalents will be recommended for state certification to teach physics in the secondary school: Physics 201, 202, 221, 251, 261, 300, 318, and either 305 or 306; G.S. 480. See the Education Department listings for additional required courses in that department. Additional courses in Computer Science, General Science, and Physics are suggested for additional interest.

Students interested in careers in engineering, industrial management, mathematical modeling, etc., which might require a background in physics, mathematics, economics, or chemistry, are encouraged to speak to the appropriate department head and the director of the dual-degree engineering program, or to the director of interdisciplinary studies if they wish to design an interdisciplinary program of study more suited to their career goals than a traditional departmental program.

Phys. 100 Everyday Physics **4 hours**

This course is designed for non-science students. A study from non-technical, non-mathematical viewpoints of the aims, methods (experimental and theoretical), and achievements in the attempts to understand the basic principles governing the physical world. The course begins with commonplace observations and concrete examples and then proceeds to generalizations and hypotheses that unify these observations.

Phys. 201-202 General Physics **4 hours each**

First Semester: mechanics, heat, and wave phenomena. Second Semester: electricity and magnetism, light and selected topics in atomic and nuclear physics. Specifically intended for science, engineering, and other students who have had or are concurrently taking calculus. (Three hours of lecture and three hours of lab each week.)

Phys. 221 Introductory Electronics **4 hours**

An introduction to electrical and electronic circuits and their elements, with an emphasis on applications. *Prerequisite: Phys. 201-202, or permission of the head of the department.*

Phys. 222 Digital Electronics **4 hours**

An introduction to digital electronics with applications in instrumentation and computer electronics. Topics include Boolean Algebra, basic gates, logic families, encoders-decoders, astable/monostable multivibrators, flip-flops, counters, readouts, shift registers, bi-directional bus structure, serial-parallel/parallel-serial data conversion, and D to A and A to D conversion. (Three hours of lecture and two hours of lab each week. May be taken for credit as Computer Science 222.) *Prerequisite: Math. 103 or equivalent or permission of the head of the department.*

Phys. 251 Mechanics **4 hours**

A study of particle mechanics, central force motions, motions of rigid bodies, free, forced and coupled oscillations, rotations about an axis, moving coordinates systems, conservation theorems, Lagrange's equations, relativistic mechanics, mechanics of continuous media, and theory of small vibration. *Prerequisite: Physics 201-202.*

Phys. 261 Electricity and Magnetism **4 hours**

A study of electrostatics, magnetostatics, scalar and vector fields, Poynting's vector, electrodynamics, Maxwell's equations, boundary conditions, and wave propagation. *Prerequisite: Phys. 201-202.*

Phys. 300 Modern Physics **4 hours**

A presentation, based on mathematical and physical reasoning, of the foundations of modern physics. Treats the subjects of special relativity, kinetic theory, atomic theory, and introductory quantum mechanics on the level of the Schroedinger equation. (Intended for chemistry, mathematics, physics, or pre-engineering majors.) *Prerequisite: Phys. 201-202 or permission of the head of the department.*

Phys. 305 Geometric Optics **2 hours**

The study of light from a non-wave theory standpoint. This course includes the study of reflection, and optical instruments. *Prerequisite: Phys. 201-202 or permission of the head of the department.*

Phys. 306 Physical Optics **2 hours**

Topics covered in this course include interference dispersion, diffraction, polarization, electromagnetic nature of light, and quantum optics. *Prerequisite: Phys. 201-202.*

Phys. 307 Heat and Thermodynamics **2 hours**

A study of macroscopic properties of matter from a thermodynamic point of view. Topics include equation of state, the first law of thermodynamics and its consequences, entropy and the second law of thermodynamics, thermodynamic potentials, and applications of thermodynamics to simple systems. *Prerequisite: Phys. 201-202.*

Phys. 308 Statistical Thermodynamics **2 hours**

A study of how the microscopic properties of a system can be determined using the methods of kinetic energy and statistical mechanics to calculate the dependence of the macroscopic properties of a system on thermodynamic variables. The Bose-Einstein and Fermi-Dirac statistics are discussed and applied to different systems. *Prerequisite: Phys. 307.*

- Phys. 314 Introduction to Classical Quantum Mechanics** **2 hours**
 A continuation of the study of classical quantum mechanics begun in Phys. 300. Topics include the three-dimensional Schroedinger equation, selection rules, addition of angular momentum, fine structure in hydrogen, exchange symmetry, the Zeeman effect, and stimulated emission. *Prerequisite: Phys. 300 or permission of the head of the department.*
- Phys. 316 Selected Topics in Solid State and Nuclear Physics** **2 hours**
 A continuation of the study of modern physics. Topics include molecular bonding and spectra, free-electron theory of metals, band theory of solids, superconductivity, nuclear shell model, radioactivity, nuclear reactions, and elementary particles. *Prerequisite: Phys. 314 or permission of the head of the department.*
- Phys. 318 Advanced Physics Lab** **2 hours**
 Experiments concerning topics covered in Phys. 300 are emphasized.
- Phys. 477 Seminar in Physics** **2 hours**
 A survey of physics for review and correlation of various fields within the discipline. *Prerequisite: Permission of the head of the department.*
- Phys. 480 Methods and Materials in Teaching Physical and Life Sciences** **4 hours**
 For course description see General Sciences 480. (May be taken for credit as Education 480.)
- Phys. 487-488 Independent Study** **2 or 4 hours**
- Phys. 490 Senior Project** **2-6 hours**
 Research problems in theoretical or experimental physics. Experimental physics if offered in such areas as vacuum systems, machine tool operation, electron systems, spectroscopy, electron microscopy, microwave propagation, nuclear radiation and computer science. Theoretical physics projects are unlimited in scope and are arranged through consultation with the student's faculty advisor.

Politics and Public Policy

Aims

To provide for the study of American politics, political institutions and processes, patterns of political behavior, and international relations, and how these areas are related to the making of public policy; to prepare students for graduate or professional school; to enhance the career objectives of students in the theoretical, technical, and practical dimensions of administration, management, and policy in both the public and private sectors.

Requirements for Field of Concentration

Students are required to complete a minimum of 38 hours in the department exclusive of the Senior Project. All students will complete Pol. 225 and Pol. 478 plus at least 16 additional hours of classroom based courses and at least a 4-hour Internship. Related requirements are History 201-202. Cognate courses are recommended in History, Philosophy, Economics and Business, Sociology, Foreign Languages, Communications, Mathematics (especially statistics), Computer Science, and selected areas of science and technology.

Pol. 225 American Government**4 hours**

An introduction to the formal and informal structures, institutions, and processes which comprise the American political system at the national level.

Pol. 227-228 Intergovernmental Relations**2 hours each**

The courses cover introductory material on state and local governments, including U.S. constitutional provisions about states, varieties of state constitutions, typical powers of governors, state legislatures, state executive agencies, and the arrangement of state courts and their importance. Major program responsibilities of state and local governments are also covered. Examines the development of the federal-local relations. The major topics included are joint programming, the grant-in-aid system, revenue sharing, and current issues and proposals regarding federal and state program responsibilities. The implications of federal decisions for states and local governments are also included.

Pol. 231 The Politics of Public Policy**4 hours**

An examination of selected models and approaches to the study of public policy. While providing an overview of the policy process, the focus of attention is on how public issues arise, how they are placed upon the public agenda, and how they are kept off that agenda. Selected case studies of public policy making are analyzed.

Pol. 232 Public Policy Formation**4 hours**

The focus is on the development of proposed courses of action for dealing with public problems, an examination of the sources of policy proposals, the criteria used by individuals in making choices, and the mobilization of support for the policy choice. Special attention is paid to the role of the policy analyst and the ethical dimensions of policy choice.

Pol. 243 International Politics**4 hours**

An analysis of the factors involved in the relations among states, traditionally and in a global perspective. This analysis is applied to theoretical, historical, and current political and political-economic situations.

Pol. 288 The American Political Novel**2 hours**

Political life in the United States at the municipal, state, and federal level as reflected in a number of political novels since 1932. The course examines *Grapes of Wrath*, John Steinbeck; *It Can't Happen Here*, Sinclair Lewis; *All the King's Men*, Robert Penn Warren; *The Last Hurrah*, Edwin O'Connor; and *Advise and Consent*, Alan Drury, plus an additional book selected for each student. (May be taken for credit as History 288.)

Pol. 300 Public Administration**4 hours**

An examination of the basic concerns of American public agencies, principally federal; problems of planning, organization, staffing and efficiency; problems of their proper place in the political arena; problems of relating democratic principles of administrative actions.

Pol. 311 Public Budgeting Process**4 hours**

This course examines the process and politics of budgeting in the federal government, with some attention to state and local budgeting problems. The role of the President and the executive branch in budgeting, congressional processes for budget approval, and the implementation of the budget are studied in depth. Recent budgeting systems used in the federal government are included, as well as examination of the importance of budgeting to overall program and policy development in government. Students critique an actual public budget as part of the course.

Pol. 320 Legislative Process**4 hours**

The course deals with the role of Congress in federal policy-making. The constitutional powers of Congress are examined, but the primary emphasis is on the influences on Congress and its organization for decision-making. The importance of constituents, the executive branch, political parties, colleagues, congressional committees, and the media are all included. Some attention is also given to state legislatures.

Pol. 321 Executive Leadership**4 hours**

This course focuses on the roles of the President, governors, mayors, and other political executives in the American political system. The constitutional powers, historical development, and current responsibilities and problems of the presidency are examined. The President's relations with Congress, the courts, the bureaucracy, the press, and the public are also included. Similar issues are examined with respect to governors and local government executives, with emphasis on the variety of powers and approaches possible for state and local executives.

Students examine the career and contributions of one political executive as part of the course.

Pol. 322 Judicial Behavior

4 hours

The role of the courts in the political process and as policy-makers will be a focus of study. Various approaches to the understanding of the behavior of judges and legal system actors are examined. The influence of values, social background factors, professional socialization, small group dynamics, role perceptions, interest group interaction, and recruitment and selection processes on judicial and legal actor decision-making will be studied. The problems of the impact of and compliance with judicial decisions are examined.

Pol. 325 Political Economy

4 hours

An examination of the links between the economy, polity, and policy. A particular focus is on the role of government in the allocation of goods, especially public goods. Basic socio-economic decision-making mechanisms will be critically analyzed, including the market, government, hierarchy, and bargaining. A variety of political economic approaches will be examined including traditional economic, non-economic, and Marxist approaches.

Pol. 328 Comparative Government

4 hours

A survey of the major approaches to the study of political systems with attention to their similarities and differences. Focuses on such approaches as historical, ideological, structural, functional, whole systems, and political economic. Liberal democratic, communist, and Third World systems are examined in terms of the whole historical systems approach. Students undertake comparative case studies.

Pol. 331 Public Policy Implementation

4 hours

The analysis of the systemic, organizational, and personal factors influencing the behavior of those who have authority to carry out policy directives. In addition, the influence of intermediaries, administrative lobbies, issue networks, recipients-clients, the media, and policy evaluators on the implementation of public policy will be studied. Legal, bureaucratic, and personal imperatives affecting the composition and interaction of actors in relation to specific policies are examined.

Pol. 332 Public Policy Evaluation

4 hours

This course focuses on the ways in which public programs are evaluated. It examines who does the evaluation and the types of evaluation methods that may be used. Students critique and design policy evaluations as part of the course.

Pol. 339 American Political Parties and Interest Groups

4 hours

A study of major and minor political parties in the U.S. Attention is given to the history, structure, functions, tactics, and financing of political parties in a democratic system, as well as to the American electoral process and a brief look at foreign party systems. The role of interest or pressure groups in a democratic pluralist society is also given major attention. *Pol. 225 or Hist. 201-202 are recommended for background in the field.*

Pol. 341 U.S. Foreign Policy

4 hours

An examination of the personalities, assumptions, and mechanics behind the making of U.S. foreign policy since World War II. The material provides a framework for analyzing and evaluating various interpretations of national security and subsequent international commitments. Reference is made to particular examples of foreign policies, such as the Truman Doctrine, Korea, Vietnam, and Sino-American and U.S.-Soviet relations.

Pol. 357 History of Political Philosophy

4 hours

A survey of the major literature in the evolution of political philosophy from the classical period to Karl Marx. A special effort is made to relate the principal concepts in political philosophy, such as justice, freedom, and equality, to contemporary politics.

Pol. 465 Constitutional Law

4 hours

The study of the judicial elaboration and interpretation of the U.S. Constitution. A case study approach to the historical development of American constitutional principles. *Pol. 225 or Hist. 201-202 are recommended for background in the field.* (May be taken for credit as History 465.)

**Pol. 470 Internship in Politics,
Public Administration, and Public Policy**

2-8 hours

A faculty supervised off-campus learning experience for a student concentrating in politics with an academic dimension involving off-campus work and a substantive research project. A faculty member must approve the internship experience and the projected academic research work prior to the student's beginning the internship experience. Off-campus work is jointly supervised by the faculty member and an approved off-campus mentor. The student is evaluated by the faculty supervisor who may take into consideration an evaluation of the student's performance by the off-campus mentor. In all cases an internship project must be submitted for evaluation by the student in order to complete successfully the requirements for the internship.

Pol. 478 Research Methods in Political Science

4 hours

A consideration of the scope of political science through a survey of the prominent research in the field. Attention is given to the "scientific" dimension of this work, including reference to computer-assisted political analysis.

Pol. 487-488 Independent Study

2 or 4 hours

Pol. 490 Senior Project

2-6 hours

Begins first semester of the senior year.

Psychology

Aims

To assist the student in gaining a basic knowledge of psychology as the science of human behavior; to foster development of social awareness and social adjustment through an understanding of the fundamental similarities and differences among people; to encourage both original and critical thinking; and to give background preparation for professions which deal with individual and group behavior.

Two Plans of Concentration

Two plans of concentration are offered — one leading to the Bachelor of Arts degree and the other to the Bachelor of Science degree.

The Bachelor of Science plan is designed for students most interested in the scientific aspects of psychology, particularly for those who are considering graduate work in experimental or clinical psychology. Most Ph. D. programs in experimental or clinical psychology require the types of undergraduate courses included in the Bachelor of Science plan.

The Bachelor of Arts plan is flexible, and can be designed to meet the needs of students who wish to pursue masters-level education in a variety of fields, such as counseling, organizational psychology, and guidance, desire a broad undergraduate education and graduate education in areas outside of psychology, such as business, law, and education, or seek a broadly applicable undergraduate degree.

Requirements for the Bachelor of Arts Degree

The Bachelor of Arts degree requires a minimum of 24 hours in the department (including Psychology 100, 103, 415, and 477) plus a Senior Project. Depending upon the direction of the student's interests, the department sees as particularly useful and relevant courses in sociology, social work, philosophy, child and adolescent development, biology, and the history of scientific thought.

Requirements for the Bachelor of Science Degree

The Bachelor of Science degree requires a minimum of 30 hours in the department, including Psychology 100, 103, 311, 312, 415, and 477, as well as a Senior Project. Six hours are also required in natural science. Two of these must either be in physiological psychology (Psychology 335) or in biology courses stressing animal biology, physiology, or genetics. The remaining four hours may be in similar biology courses, physics, or chemistry (including Chemistry 100).

Students planning on graduate school in psychology are also advised to take at least one course in calculus and to obtain some skills in computer use. It should also be kept in mind that most graduate schools require Ph. D. candidates to show a reading knowledge of one or two foreign languages, usually French, German, or Spanish.

Psych. 100 General Psychology **4 hours**

An introduction to the general field of psychology, including learning, motivation, sensation, perception, cognition, personality, abnormal behavior, testing, physiological psychology, and social psychology.

Psych. 103 Quantitative Methods in Psychology **4 hours**

An introduction to the basic problems and techniques of measurement in psychology and to basic statistical techniques used in psychological research. This course also includes an introduction to designs for research and experimentation.

Psych. 186 Psychology of Consciousness **2 hours**

A consideration of the nature of human consciousness, concentrating upon both normal consciousness and altered states of consciousness resulting from dreams, hypnosis, biofeedback, drugs, and meditation. Emphasis is given to recent explorations concerning two major modes of consciousness: the intellectual and the intuitive.

Psych. 275 Student Development in Higher Education **2 hours**

(See Education 275.)

Psych. 287 Organizations and Human Behavior **4 hours**

(See Econ. 287.)

Psych. 311 Experimental Psychology I **4 hours**

This course encourages the student to become conversant with the basic factual and theoretical content of experimental psychology at an intermediate level and to engage in experimental work in the areas of sensation, perception, and cognitive processes. Some familiarity with computers is highly desirable. *Prerequisites: Psych. 100, 103.*

Psych. 312 Experimental Psychology II **4 hours**

A continuation of Psych. 311, covering the areas of learning, perceptual-motor skills, and motivation. *Prerequisites: Psych. 100, 103.*

Psych. 315 Modification of Behavior **2 hours**

The course has two main aims: to help the student learn systematically to analyze behavior in terms of reinforcement principles and to help the student develop skills in the application of these principles to the modification of behavior in practical situations. Examples of the latter arise in the areas of behavior disorder, child-rearing, the work situation, and habit change.

Psych. 324 Personality: Theory and Application **4 hours**

The course covers major theories of personality and principles of personal adjustment and growth, including development, motivation, dynamics, problems in group living, and intellectual, emotional, and social adjustment. The course should be valuable to the potential doctor, nurse, social worker, child-care worker, teacher, or parent.

Psych. 325 Abnormal Psychology **4 hours**

The development, dynamics, social significance, and theoretical implications of defiant behavior. While the traditional psychiatric diagnostic categories are studied, there is a strong emphasis upon alternative approaches in the medical model of abnormality. The concepts of normality and abnormality in relation to cultural norms and stereotypes are examined in depth. The course should prove particularly useful to students planning on a career in the helping professions.

Psych. 326 Experimental Social Psychology	4 hours
The aspects of social behavior and specific social issues are examined within the context of theory and experimental research. Topics include social factors in the development of morals, cooperation and competition, aggression, racial and social-class differences in personality, motivation, language, attitudes and attitude change, authoritarianism and obedience, interpersonal and group processes (affiliation, attraction, perception, conformity, and leadership), and discussion of drug and sex issues.	
Psych. 327 Seminar in Theories and Techniques of Psychotherapy and Counseling	4 hours
The course provides the student with a basic knowledge of the varied theories and techniques used in professional psychotherapy and counseling. Both academic and experiential learning are included, which should be particularly useful to students interested in going on into one of the helping professions such as clinical psychology, psychiatry, social work, school psychology, counseling, or occupational therapy. <i>Prerequisites: Psych. 100 and 324 or 325 plus permission of the instructor.</i>	
Psych. 328 Human Sexuality	2 hours
An examination of the various psychological, biological, social, comparative, legal, and ethical aspects of human sexuality. In addition to sexual anatomy, physiology, birth control, and sexually transmitted disease, the course takes up current issues such as sex-role development and sex therapy. (May be taken for credit as Education 328.)	
Psych. 335 Biological Bases of Behavior	2 hours
An examination of the neural and biochemical substrata of the more important aspects of animal and human behavior. <i>Prerequisite: Psych. 100.</i>	
Psych. 410 Tests and Measurements (See Sp. Ed. 410.)	2 hours
Psych. 415 Systematic Psychology	4 hours
An examination of the systematic positions and theories that have been important in the history of psychology, as well as a brief review of the philosophical bases underlying these positions.	
Psych. 477 Senior Seminar	2 hours
An introduction to professional opportunities in psychology and related fields and an exploration of value and ethical consideration. Continued guidance on senior project and senior comprehensive examinations also is provided during the course.	
Psych. 480 Methods and Materials in Teaching Psychology	4 hours
A study of the methods and materials used in teaching psychology in the secondary school. The course has a systematic and experimental emphasis. <i>Prerequisite: 16 hours of psychology.</i> (May be taken for credit as Education 480.)	
Psych. 487-488 Independent Study	2 or 4 hours
Psych. 490 Senior Project	2-8 hours.

Religious Studies

Aims

The Religious Studies program undertakes the study of religion in the context of the broader concerns of the nature and meaning of human existence. Religion provides a perspective for reflecting on the world in which we live, the values we hold, and the way in which we express those values in word and deed. Thus, the program is designed to place the study of religion in terms of the question, “What does it mean to be a human being in this world?” Therefore, the program concentrates on teaching the student the

primary ways to study religion in the modern world. As such, the Religious Studies major is intentionally interdisciplinary. It seeks to integrate the study of the origins and historical development of both Western and Eastern religious traditions, the various manifestations of religion (for example, sacred texts, myths, symbols, rituals, and institutions), and the variety of ways in which religion may be analyzed and interpreted.

Requirements for Field of Concentration

Concentration in Religious Studies requires a minimum of 30 hours in the department exclusive of R.S. 100 and the Senior Project. The following courses are required: 220, 241, 240 or 243, 301, 311, 321, 322, 344. Also required are Interdisciplinary Studies 251, and 252.

R.S. 100 Judaeo-Christian Heritage and Contemporary Living 4 hours

A study of the Judaeo-Christian heritage with the aim of understanding how Biblical writers reflect on the basic human and social issues which continue to engage contemporary people. Study is done within a triple context: (1) the Biblical tradition; (2) the liberal arts tradition of Bethany College; and (3) contemporary questions.

R.S. 220 Introduction to the Study of Religion 4 hours

An introductory and comparative study of the role and meaning of religion in three distinct religious traditions. Emphasis is placed on constructing a model for mapping and understanding different ways of being religious. Various methodological orientations available for the study of religion are discussed.

R.S. 240 Japanese Religions 4 hours

An introduction to the historical development of Japanese religion and culture through the study of its major spiritual expressions: Japanese shamanism and folk religion, Zen Buddhism, Confucianism, State Shinto, and the new religious movements of the modern period.

R.S. 241 Religions of East Asia and India 4 hours

An introductory and comparative study of the religious beliefs and value systems of India, China, and Japan. Readings, lectures, and class discussions focus on the primary religious and spiritual themes found in Shinto (Japan), Confucianism and Taoism (China), Hinduism (India), and Buddhism (India and East Asia).

R.S. 243 Buddhism 4 hours

A general survey of the development of Buddhism as a religious-philosophical and cultic tradition in India and East Asia. Topics examined include the Buddhist understanding of the human condition, spiritual liberation, ethics and meditative practices, Buddhist monasticism, sacred biography of the Buddha, and devotional cults.

R.S. 260 Creation Mythology 2 hours

A comparative study of creation stories drawn from several distinct cultures, times, and places. Topics for discussion include the nature of creation mythology, the ways in which creation stories serve as models for present world order, and creation mythology in the modern world.

R.S. 264 Justice, Law, and Religion 2 hours

An exploration of the "law codes" of several distinct religious traditions and the various views of justice found in these religious traditions. The course focuses on the relationship between law and religion.

R.S. 301 The Pentateuch 4 hours

A study of the first five books of the Bible, emphasizing the central religious traditions of the Jewish faith: creation, patriarchs, exodus, Sinai, and wilderness. The course is an introduction to Israelite history, the development of religious practices in Israel, and a broad range of theological perspectives in ancient Israel.

R.S. 303 Job 2 hours

An intensive study of the book of Job in the context of Ancient Near Eastern wisdom thought and subsequent retellings of the story of Job. Emphasis is on the theological issue of the suffering of the righteous and on the relationship between story and theology.

- R.S. 304 Mission and Message of the Prophets** **2 hours**
The critical and appreciative reading of selected writings of the classical prophets of ancient Israel (Amos, Hosea, Isaiah, Jeremiah, and Ezekiel). Students are assisted to understand the major ideas of the prophets and the relationship of these ideas to the issues facing both ancient and modern people.
- R.S. 311 Studies in the Gospels** **4 hours**
An introduction to methods for discerning the messages of the gospel writers. While concentrating on the Gospel of Mark, the course equips the student to do basic study in any of the Gospels. *Prerequisites: R.S. 100 and permission of the instructor.*
- R.S. 312 Galatians and Romans** **2 hours**
A close and critical examination of the Biblical books of Galatians and Romans. The student gains skill in the reading of these books and is introduced to the life and ministry of Paul.
- R.S. 321 Myth, Symbol, and Ritual** **4 hours**
Drawing on the works of Victor Turner and Mircea Eliade, symbols and the ways in which they are expressed through myths and ritual actions is explored. The student gains an understanding of the ways in which myth, symbols, and rituals serve as fundamental means for structuring human existence in the context of the sacred.
- R.S. 322 Sociology of Religion** **4 hours**
A study of formal religion and its functional equivalents both in primitive and modern societies, the relationship between religion and other social institutions, and religion and social change. (May be taken for credit as Sociology 356.)
- R.S. 331 Sacred History and Religious Traditions** **4 hours**
An exploration of the distinct types of sacred history found in Islam, Judaism, Christianity, and Buddhism. The course focuses on the different images of human history and human fulfillment revealed in these religious traditions.
- R.S. 344 Tribal Religion** **2 hours**
A study of cosmological and ritual order in several tribal societies. Topics include the "primitive" as a category for the Western experience of the other, art and symbolism in religion, orientations in time and space, oral tradition, and millerarianism.
- R.S. 351 Ancient Near Eastern Civilization** **4 hours**
An introduction to the historical development of life, culture, and religions of Mesopotamia, Egypt, and the Syro-Phoenician coast, including international relations from pre-history to Alexander the Great. (May be taken for credit as History 351.)
- R.S. 352 Islamic Civilization** **4 hours**
A study of the life and background of the prophet, the *Qur'an*, the development of Islamic thought, and the early Islamic empires.
- R.S. 353 Hellenistic Civilization** **4 hours**
An introduction to the Graeco-Roman Oriental world based on a survey of social and cultural developments from Alexander the Great to Julius Caesar. (May be taken for credit as History 353.)
- R.S. 361 American Catholicism** **2 hours**
A descriptive study of contemporary American Catholicism and its roots. The course emphasizes such topics as modern Catholic worship, the crisis of authority, the "immigrant church," the church and political life, Catholic education, and the charismatic movement.
- R.S. 362 American Judaism** **2 hours**
A descriptive study of contemporary American Judaism and its roots. The course emphasizes the life-cycle customs of Judaism. Jewish holidays are studied in the context of Jewish history. The course seeks to develop a broader understanding of the modern Jewish community in the United States and is supported by a grant from the Jewish Chautauqua Society.
- R.S. 363 Alexander Campbell and His Reformation** **4 hours**
A study of the background, life, thought and historical contexts and outcomes of Alexander Campbell and his colleagues and successors. Lectures, debates, multi-media materials, and field work are included. Emphasis is placed on primary sources and each student completes a satisfactory primary research project.

R.S. 365 Pilgrimage and Religion	2 hours
A comparative exploration of pilgrimage as a ritual process in distinct religious traditions (both Western and Eastern). The student gains insight into the ways in which pilgrimage brings about spiritual transformation, a shift in worldview, and the creation of specific forms of community.	
R.S. 366 Dreams, Dreaming, and Religion	2 hours
A comparative study of Western and non-Western understandings of dreams as a mode of apprehending and transforming human experience. Topics include the study of dreams and ontology, dreams and the sacred, therapeutic applications of dreaming, and dream theory as a means of interpreting myth, symbol, and ritual.	
R.S. 373 History of Early Christianity	4 hours
An examination of the origins and expansion of Christianity from the period of Augustus Caesar to Constantine. The problem of institutions, consolidation, varieties, division, and unification is explored in historical context.	
R.S. 487-488 Independent Study	2 or 4 hours
R.S. 490 Senior Project	2-8 hours

Science Applications (Honors)

Aims

The Honors Program in Science Applications prepares students in the current theoretical and applied knowledge, skills, and techniques of applied sciences and engineering design; provides an engineering and scientific foundation for applied research through integrated studies in the physical and life sciences, mathematics, and computer science; produces a graduate with science and engineering preparation for graduate schools and corporate, industrial, and government research career options; achieves a combined technical and liberal arts education serving future career advancement in technological leadership roles.

Requirements for Field of Concentration

Admission to this program is selective. All students in the program are required to complete a common base of 40 hours, including Chemistry 101-102, Physics 201-202, 222, Computer Science 150 or 201, 202, Mathematics 201-202 and 341. In addition, all students must complete 8 hours of a common applied research and design component: S.A. 176, 276, 376, and 476; an internship (S.A. 470); the senior project (S.A. 490). S.A. 176, 276, 376, and 476 must be taken during the spring semester of the freshman, sophomore, junior, and senior year, respectively.

All students will also elect one of the following options: 1) For the degree in Science Applications, 24 hours of course work selected from the courses listed below, at least 12 of which must be chosen within a single area as listed. 2) For the degree in Chemistry, Mathematics, Computer Science, or Physics, 24 hours within the appropriate listing of courses for that field. (Biochemistry is part of the Science Applications degree program but is not a separate field of concentration.)

Chemistry 211-212, 322, 324, 326, 404, 414.
Mathematics 203, 344, 354, 383-384, 390, 401.
Computer Science 222, 280, 290, 330, 370, 380, 390; **Mathematics** 354, 383.
Physics 251, 261, 300, 305-306, 307-308, 314, 316, 318.
Biochemistry: **Biology** 210, 290, 343, 425, 467; **Chemistry** 211-212, 314.

It is recommended that students in the program also complete a Professional Core in Management, Public Affairs, or Communication.

S.A. 176 Introduction to Science Seminar **1 hour**
Students in this course meet once a week during the semester to discuss current topics of interest in science and math. They learn how to prepare to hear an outside expert discuss research, how to find pertinent references in the literature, and how to ask questions in the seminar format. Students are required to attend presentations made on campus by outside speakers in sciences.

S.A. 276 Seminar and Literature Search **1 hour**
Students in this course meet once a week during the semester. They attend and participate in seminars by outside experts and learn a systematic approach to searching the scientific literature appropriate to the area of emphasis. Electronic and “on line” methods are taught in addition to traditional methods of literature search.

S.A. 376 Preparing Research Proposals **1 hour**
Students in this course meet once a week during the semester. They select topics for research proposals by reading and defending short research papers from the published literature or by further investigation of an outside speaker’s topic. One of these proposals may be related to the internship. Research proposals are presented orally and defended.

S.A. 470 Internship in Science Applications **2 hours**
A faculty supervised, off-campus industrial work experience, co-sponsored and coordinated with a participating industry. *Prerequisites: Junior standing and approval of the Director of the Honors Program in Science Applications.*

S.A. 476 Seminar and Project Report **1 hour**
Students in this course meet once a week during the semester. They participate in the seminars by outside speakers, and each student presents an oral report on the summer internship and a preliminary oral report on his or her senior project.

S.A. 487-488 Independent Study **2 or 4 hours**

S.A. 490 Senior Project **2-8 hours**

Social Sciences

Social Sciences is a grouping of courses only. It is not a separate department. Students who participate in such programs as the American University Washington Semester and other similar off-campus programs may receive credit in this area.

Students majoring in History, Politics and Public Policy, Economics, or Sociology who wish to be recommended for state certification in Social Studies must complete the following courses: History 101, 201, 202, 225; Soc. 100 or 220; Eco. 200; G.S. 202 or Soc. Sci. 302; Pol. 225, as well as 24 hours in their major field. See the Education Department listing for required Professional Education courses.

Soc. Sci. 202 Statistical Analysis with SPSS **1 hour**
An introduction to the use of Statistical Package for the Social Sciences in the computer analysis of experimental data. (Activity course: CR/NCR only.) *Prerequisite: Psychology 103, Math 281, or permission of the instructor.*

Soc. Sci. 302 World Geography**2 hours**

The study of the physical, social, and political geographic factors of the world. Recent changes in Europe, Asia, and Africa are discussed.

Soc. Sci. 320 Cultural Backgrounds of British Literature**4 hours**

A survey of British history from the Celtic times to the present. Major political developments such as the development of parliamentary government and the constitution are taken into account, but major emphasis is placed on extra-political matters such as the development of the English language, music, art, architecture, drama, the English church, education, and domestic life. Every effort is made to take advantage of the locale to visit museums, castles, cathedrals, universities, Parliament, theatres, and concert halls. Taught in Oxford, England.

Soc. Sci. 480 Methods and Materials in Teaching Social Studies**2 hours**

An examination of the nature, objectives, and curricula of social studies in junior and senior high schools. Concepts and methods of approach are emphasized. Methods, techniques, teaching aids, resource units, lesson plans, evaluation, and teaching reading and study skills. (May be taken for credit as Education 480.)

Sociology and Social Work

Aims

To acquaint students with basic theories, research techniques, and applied practices in sociology, social work, and anthropology, and to prepare students for graduate study in these disciplines, or to enter professions in community service and other fields which require a knowledge of social relations.

Requirements for Field of Concentration in Sociology

A minimum of 36 hours in Sociology, including Sociology 100, 200, 209, and 477, plus a Senior Project. Related requirements are Mathematics 281 or Psychology 103; Interdisciplinary Studies 251 or 252, the other being strongly recommended. Sociology 100 or 220 is a prerequisite to Sociology 200, 309, 320, 329, 330, 353, 361, 362, 470, and 477.

Soc. 100 Introduction to Sociology**4 hours**

An introduction to basic concepts and perspectives of the study of society. Includes analysis of principal institutions and social processes.

Soc. 200 Sociological Theory**4 hours**

An examination of social thought with primary emphasis upon the principal theorists from the 19th century to the present.

Soc. 205 Social Problems**4 hours**

The analysis of fundamental and continuing problems and dilemmas, such as crime and delinquency, racial and ethnic relationships, health care and maintenance, employment, housing, poverty, and environmental issues.

Soc. 209 Research Methods**4 hours**

A course guiding the student through the formal process of designing an empirical project. Emphasis is placed upon systematically reviewing relevant literature and justifying decisions concerning techniques to be used. Includes hypothesis formation and testing, methods of data collection and analysis, and problems of sampling. *Prerequisite: Math. 281.*

- Soc. 210 Race and Minority Concerns** **2 hours**
A survey of racial, cultural, ethnic, age, and sexual diversity with emphasis on the effects of prejudice and discrimination on minorities.
- Soc. 220 Cultural Anthropology** **4 hours**
The examination of cultural variability, especially in terms of its influence on human behavior. Comparative analysis of cultural systems with an emphasis on contemporary non-Western societies.
- Soc. 300 Social Movements** **2 hours**
An examination of the origins and development of religious, political, agrarian, and labor movements. Both historical and contemporary examples of revolutionary and reform movements are analyzed.
- Soc. 302 Schools and Society** **4 hours**
A study of the role of schools in a society, of the school as a formal and informal organization, and of the function of schooling. The course will utilize the methodologies of the disciplines of education, sociology, and other social sciences. Case studies and on-site observations combine with a variety of readings to provide a wide range of viewpoints for students to evaluate. (May be taken for credit as Education 302.)
- Soc. 309 Formal Organization** **4 hours**
Analysis of commercial, industrial, and public organizations and bureaucracies. Morale, subgroup conflict and cooperation, and the impact of social environment on organizational structure.
- Soc. 329 Population Study** **2 hours**
An introduction to demography. Theories and methods of studies concerning population size and composition. Trends of population change in the world and in the United States.
- Soc. 351 The Family** **4 hours**
An examination of the structure and function of the family as a basic unit of social organization. Changing nature of marriage and the family in American society.
- Soc. 353 Social Stratification** **2 hours**
A study of forms of social stratification and differentiation. Study of class, prestige, and power as the bases of stratification. Theories of the cause of social stratification and social mobility.
- Soc. 356 Sociology of Religion** **4 hours**
A study of formal religion and its functional equivalents both in primitive and modern societies; the relationship between religion and other social institutions; and religion and social change. (May be taken for credit as Religious Studies 322.)
- Soc. 361 Deviance and Social Control** **4 hours**
A sociological examination of problems of deviance such as crime, mental illness, and sexual deviation. Institutions of correction and rehabilitation are examined.
- Soc. 362 Socialization** **2 hours**
A study of socialization as a process whereby the individual becomes a functioning member of a group. Processes of resocialization.
- Soc. 470 Field Work** **2-8 hours**
A course open to students who are sufficiently advanced in their theoretical and methodological studies to undertake investigation of a practical or theoretical problem in a field setting. *Prerequisite: Permission of Department.*
- Soc. 477 Senior Seminar** **4 hours**
A consideration of conceptual and research problems in a seminar setting. Includes preparation for comprehensive examinations and senior projects.
- Soc. 487-488 Independent Study** **2 or 4 hours**
Studies may be planned as extensions of, or separate from, existing Department offerings.
- Soc. 490 Senior Project** **2-8 hours**
A course open to students approaching the completion of their majors. Designed to help students evaluate their activities in sociology and to integrate their educational experiences.

Requirements for Field of Concentration in Social Work

The goal of the social work program is to prepare the student for beginning social work practice. Students will accomplish this goal by completing the following courses: S.W. 120, S.W. 220, S.W. 310, S.W. 350, S.W. 352, S.W. 470, and S.W. 477. In addition, students must complete Bio. 100, Bio. 167, Psy. 100, Soc. 205, Soc. 209, Soc. 210, and a senior project in Social Work. Students will be advised to take selected perspective courses to complete the Social Work major. Social Work 120 is a prerequisite to all courses in Social Work except Social Work 125-150 and 310.

The Social Work program is accredited at the BSW level by the Council on Social Work Education.

S.W. 110 Self-Defense/Rape Prevention and Awareness **1 hour**
An examination of the laws governing sex offenses and self defense, as well as demonstration of self defense tactics. (Activity course: CR/NCR only.)

S.W. 120 Introduction to Social Welfare and Social Work **2 hours**
An examination of the origin and development of social welfare as an institution in the United States. Examination of the role of the social worker, and the place of the profession in society. Arranged field experience.

S.W. 125-150 Special Topics in Social Work **2 or 4 hours each**
Seminars in this category take up special topics of mutual concern to faculty and students.

S.W. 125 Child Welfare Services **2 hours**
A comprehensive study of the principal child welfare services. It begins by defining child welfare, placing it as a field of practice within social work, and presents a scheme for the categorization of child welfare problems in terms of role theory. It provides a historical perspective on how and why welfare services developed to describe the current socioeconomic context in which they operate. Topics covered include adoption, child abuse and neglect, day care, foster care, and other child caring institutions.

S.W. 130 Alcohol Use & Abuse **2 hours**
A presentation of alcohol education to those interested in better understanding the effects of alcohol on individuals, families, and the community at large. Topics for study include: the use and misuse of alcohol throughout history, effects of alcohol on the human body, personal and societal costs of drinking, etiology of alcoholism, and considerations for special populations.

S.W. 135 Working With the Aged **2 hours**
A study of the biological, psychological, social, economic, cultural, and spiritual factors of the aged in society. The course will provide an overview for persons in the helping professions who want to work with older people individually or with members of families, groups, or organizations. Research efforts will be presented that illuminate our present knowledge about various aspects of aging and about the heterogeneous elderly population in the United States.

S.W. 220 Social Welfare Policies and Services **4 hours**
The examination of the social, political and economic context of social welfare policies and programs. Analysis of specific policy issues and their implications for professional social work practice.

S.W. 310 Human Behavior and the Social Environment **4 hours**
An exploration of the person as an individual with the continuing potential for growth and change. The maturational process of the individual will be followed with emphasis being given to interaction with the social environment, coping abilities and capacity for change. The bio-psycho-socio-cultural determinants of behavior are studied integrating knowledge of the person-in-his/her situation.

S.W. 350 Social Work Practice I **4 hours**

The first course in knowledge, skill, and value development for generalist practice. Basic theories and concepts undergirding skills for professional social work practice. Study focuses on professional values, social work roles, and social work client relationships. Skills in interviewing, data collection, and case recording are explored and practiced. Required field experience.

S.W. 352 Social Work Practice II **4 hours**

The second course in knowledge, skill, and value development for generalist practice. In-depth and advanced examination of the social work process. Problem solving and intervention strategies are studied in relation to prevention, maintenance, and rehabilitation. The skill of social work practice is explored in the context of current programs and practice methods. Required field experience.

S.W. 455 Social Work Practice III **4 hours**

The third course in knowledge, skill, and value development for generalist practice. Provides advanced professional knowledge which examines problems and issues of social work practice. The transitional role of the student moving from an undergraduate academic setting to the world of work and/or graduate study will be explored. Need for specific content not previously available to the student is arranged. Required field experience.

S.W. 470 Field Placement **12 hours**

An educationally directed internship experience in a social welfare agency or programs as a social work practitioner. The field experience involves five full days a week agency experience during the fall semester of the senior year of study. The placement is designed to test and increase student practice skills with the goal of self direction and the appropriate use of supervision and consultation within the social work practice setting.

S.W. 487-488 Independent Study **2 or 4 hours**

Studies may be planned as extensions of, or separate from, existing Social Work offerings.

S.W. 490 Senior Project **2-8 hours**

Study is a directed research project in a specialized concentration of social work practice. Designed to allow the student to integrate both the field placement and academic experience.

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B.S., Slippery Rock State College; M.Ed., Kent State University; Ed. D., West Virginia University.

Emeriti

FORREST H. KIRKPATRICK, *Dean of Students and Professor Emeritus* (1927-1952). *Adjunct Professor* (1952-1958; 1970-1987), and *Distinguished Professor.* (1987); *Dean of Faculty* (1987-1988).

University of Dijon; B.A., Bethany College; M.A. and Prof. Dipl., Columbia University; University of Pittsburgh; University of London; University of Pennsylvania; University of Cambridge; University of Oxford; LL.D., Bethany College; LL.D., College of Steubenville; LL.D., Drury College; H.H.D., Wheeling College.

BRADFORD TYE, *Associate Professor of Mathematics Emeritus.* (1943-1973).

B.S., Alma White College; M.S., New York University; Rutgers University; Columbia University; University of Pittsburgh.

GEORGE K. HAUPTFUEHRER, *Professor of Music Emeritus.* (1945-1977).

B.A., B.M., Friends University; M.A., University of Kansas; Pittsburgh Musical Institute; Juilliard School of Music; Indiana University.

S. ELIZABETH REED, *Associate Professor of Physical Education Emeritus.* (1945-1975).

B.A., Muskingum College; M.Ed., University of Pittsburgh; University of Wisconsin; New York University; University of Wyoming; University of Southern California; University of Michigan.

- HELEN LOUISE MCGUFFIE, *Professor of English Emeritus*. (1947-1983)
B.A., Bethany College; M.A., University of Pittsburgh; Ph.D., Columbia University; University of Oxford.
- MARGARET MATHISON, *Professor of Education Emeritus*. (1951-1974).
B.A., M.Litt., University of Pittsburgh; University of Southern California; Pennsylvania State University; Ohio State University.
- J. DANIEL DRAPER, *Professor of Chemistry Emeritus*. (1951-1984).
B.S., Franklin and Marshall College; Ph.D., University of Maryland; Michigan State University.
- WINIFRED WEBSTER, *Dean of Women and Instructor in English Emeritus*. (1952-1960).
B.A., University of North Dakota; M.A., Columbia University.
- PERRY E. GRESHAM, *President Emeritus* (1953-1972); *Distinguished Professor*. (1975).
B.A., B.D., Texas Christian University; LL.D., Texas Christian University; University of Chicago; Columbia University; Litt. D., Culver-Stockton College; L.H.D., Chapman College; Ed.D., Transylvania University; Litt.D., University of Cincinnati; Litt.D., Findlay College; Pd.D., Youngstown University; D.B.A., Lawrence Institute of Technology; H.H.D., Bethany College; J.D., William Woods College; Litt. D., West Virginia University; L.H.D., Concord College; Ed.D., Rio Grande College; LL.D., Alderson-Broadbush College; LL.D., Quincy College; D. Hum., Washington and Jefferson College.
- SUSAN W. HANNA, *Instructor in Health and Physical Education Emeritus*. (1957-1977).
B.A. Bethany College; Marjorie Webster School of Physical Education.
- THEODORE R. KIMPTON, *Assistant Professor of Foreign Languages Emeritus*. (1965-1974).
B.S., United States Military Academy; M.A., University of Maryland; Catholic University; Laval University.
- MARJORIE E. CARTY, *Lecturer in Foreign Languages Emeritus*. (1965-1984).
Ph.B., University of Chicago; Clark University; Saltillo (Mexico) State Teachers College; University of Nicaragua; Bethany College; West Virginia University; University of Puerto Rico; Universidad Iberoamericana.
- WESLEY J. WAGNER, *Associate Professor of Art Emeritus*. (1967-1983).
Pennsylvania Academy of Fine Arts; Barnes Foundation.
- DOROTHY HUESTIS, *Assistant Professor of Education Emeritus*. (1969-1976).
B.A., M.A., Indiana University.
- CHARLES E. HALT, *Professor of Economics Emeritus*. (1969-1977).
B.S., Slippery Rock State College; M.Ed., Pennsylvania State University; Ph.D., Syracuse University; University of Pittsburgh.
- J. TREVOR PEIRCE, *Professor of Psychology Emeritus*. (1969-1987).
B.A., Princeton University; Ph.D., University of California.
- BURTON B. THURSTON, *Professor of Middle Eastern Studies Emeritus*. (1970-1984).
B.Th., Northwest Christian College; B.A., Transylvania University; B.D., Christian Theological Seminary; M.A., Butler University; Th.D., Harvard University; D.D., Milligan College; University of Washington; University of Chicago; New York University; Middle East Center for Arab Studies; University of Tübingen, West Germany; American School for Classical Studies, Athens; Howard Center for World Religions.
- LEONORA BALLA CAYARD, *Professor of Foreign Languages Emeritus*. (1970-1986).
Ph.D., Marburg University; Yale University.
- OLIVER MANNING, *Artist-in-Residence Emeritus*. (1972-1982).
B.M., Louisiana State College; M.M., Cincinnati College Conservatory of Music.
- TODD H. BULLARD, *President Emeritus*. (1980-1988).
Bethany College; B.A., West Liberty State College; M.A., West Virginia University; Ph.D., University of Pittsburgh.
- WILLIAM L. YOUNG, *Professor of History Emeritus and Head of the Department*. (1950-1988).
B.A. Bethany College; M.A., Ph.D., Ohio State University; Columbia University.

Professors

JOHN R. TAYLOR, *Professor of English and Acting Head of the Department.* (1955).

B.A., Bethany College; M.A., Princeton University; University of Akron; University of Kansas; University of Birmingham, (England); University of Edinburgh; University of Oxford.

JAMES W. CARTY, JR., *Professor of Communications.* (1959).

B.A., Culver-Stockton College; B.D., University of Chicago; M.S., Northwestern University; University of Oklahoma; George Peabody College; Scarritt College; Saltillo (Mexico) State Teachers College; Diploma from National University of Nicaragua; Diploma from University of San Carlos; Ohio University; University of Denver; Universidad Iberoamericana; D.D., Evangelical Seminary of Puerto Rico.

ROBERT E. MYERS, *Professor of Philosophy and Head of the Department.* (1964).

B.A., Bethany College; M.Div., Texas Christian University; Ph.D., Ohio State University.

GARY E. LARSON, *Professor of Biology.* (1964).

B.S., M.S., New York State University, Albany; Ph.D., Rutgers University; Albany Medical College.

JOHN U. DAVIS, *Professor of Education.* (1966).

1B.A., Bethany College; M.A., Ed.D., Columbia University; University of Nebraska; University of Oxford; Harvard University; West Virginia University.

DAVID J. JUDY, *Jennie Steindorf Renner Professor of Fine Arts and Head of the Fine and Applied Arts Department.* (1967).

B.A., Denison University; M.A., Western Reserve University; University of Mexico; Ph.D., West Virginia University; University of Oxford.

ANTHONY L. MITCH, *Professor of English and Acting Director of Interdisciplinary Studies.* (1967).

A.B. Cornell University; M.A., St. John's University; New York University.

STANLEY L. BECKER, *Professor of Computer Science and Philosophy.* (1968).

B.S., New York State College of Forestry; Ph.D., University of Wisconsin.

ALBERT R. BUCKELEW, JR., *Professor of Biology and Head of the Department.* (1969).

B.S., Fairleigh Dickinson University; Ph.D., University of New Hampshire. (*On sabbatical leave, 1989-1990 half-time.*)

LARRY E. GRIMES, *Professor of English, Head of the Department, and Director of Liberal Studies.* (1970).

B.A., Bethany College; B.D., Yale University; Ph.D., Emory University. (*On sabbatical leave, 1989-1990.*)

PAULINE R. NELSON, *Professor of Foreign Languages and Head of the Department.* (1971).

B.A., Upsala College, M.A., Ph.D., University of Pittsburgh; University of Paris.

MILTON R. SMITH, JR., *Goulding-Woolery Professor of Chemistry and Head of the Department.* (1972).

B.S., Sul Ross State University; Ph.D., Texas A. and M. University; Iowa State University; Ohio State University; Carnegie Mellon University.

T. GALE THOMPSON, *Professor of Psychology, Acting Head of the Department during the Spring Semester, and Director of Practicums.* (1974).

B.A., M.A., Ph.D., University of Missouri.

JOHN H. HULL, *Professor of Psychology and Head of the Department.* (1976).

B.S. Alma College; M.A., Ph.D. Kent State University. (*On sabbatical leave, Spring 1990.*)

LYNN F. ADKINS, *Professor of Sociology and Social Work and Head of the Department.* (1978).

A.B., Marshall University; M.S.W., West Virginia University; Ph.D., University of Pittsburgh; London School of Economics and Political Science.

ANN C. SHELLY, *Professor of Education and Head of the Department.* (1978).

B.A., M.A., Ph.D., Michigan State University.

ALBERT J. OSSMAN, JR., *Professor of Politics and Public Policy and Head of the Department.* (1982).

B.A., M.A., Ph.D., Syracuse University.

HAROLD C. SHAVER, *Professor of Communications and Head of the Department*. (1982).
B.A., Muskingum College; M.A., Ph.D., Syracuse University; Carnegie Mellon University.

DONALD L. EILENSTINE, *Professor of Economics and Business, Head of the Department, and Director of the Career Development Center*. (1987).
B.A. Ottawa University; M.A., Ph.D., University of Kansas.

Associate Professors

JAMES E. ALLISON, *Associate Professor of Mathematics and Head of the Department*. (1964).
B.S., Bethany College; M.A., West Virginia University; Texas Christian University.

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B.A., University of Colorado M.A., Ph.D., Ohio State University; Massachusetts Institute of Technology.

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B.A., American International College; M.A., University of Connecticut; West Virginia University; University of Chicago.

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B.A., Bethany College, M.A., West Virginia University; Mississippi State University.

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B.F.A. Rochester Institute of Technology; M.S., State University College of Buffalo; M.F.A, West Virginia University.

MARY ELLEN KOMOROWSKI, *Associate Professor of Mathematics*. (1982).
B.A., M.A., Ed.D., West Virginia University; The American University of Beirut. (*On sabbatical leave, 1989-1990*).

ROBERT A. PAYSEN, *Associate Professor of Chemistry*. (1983).
B.A., College of St. Thomas; Ph.D., University of Tennessee. (*On sabbatical leave, Spring 1990*).

JOHN T. BURNS, *Associate Professor of Biology and Acting Head of the Department*. (1985).
B.A., Wabash College; M.S., Ph.D., Louisiana State University.

JOSEPH M. LESEM, *Associate Professor of Communications*. (1985).
B.S., Southeast Missouri State University; M.A.J., University of Missouri.

MAJID A. SAWTARIE, *Associate Professor of Physics and Head of the Department*. (1985).
B.S., Lebanese University; M.S., M.S.C.S., Ph.D., Ohio University.

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B.A., M.A., University of Texas (El Paso); Ph.D., University of Texas (Austin); University of Paris.

FRANK H. GORMAN, JR., *Associate Professor of Religious Studies and Head of the Department*. (1988).
B.A., M.A., Oral Roberts University; M.A., Th.M., Fuller Theological Seminary; Ph.D., Emory University.

Assistant Professors

ROBYN R. COLE, *Assistant Professor of English*. (1968).
B.A., University of Maryland; M.A., University of Georgia; Ohio University; West Virginia University.

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B.S., Manhattan College; M.S., Springfield College.

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Georgia Institute of Technology; B.A., M.S., Ohio University; Indiana University.

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B.F.A., M.A., Miami University.

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B.S., Chubu Institute of Technology (Japan); M.S.E.E., M.S.C.S., Ohio University.

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B.S., M.A., Indiana University (Indiana, Pennsylvania); M.A., University of Pittsburgh; M.Sc., Ohio University.

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B.S. Concord College; M.S., Virginia Polytechnic Institute and State University.

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B.A., Tehran School of Social Work; M.A., Ph.D., Michigan State University.

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B.Ph., Grand Valley State University; M.A., Ph.D., The Divinity School, University of Chicago.

MARK W. MACWILLIAMS, *Assistant Professor of Religious Studies.* (1989).

B.A. Syracuse University; M.A. Indiana University; Ph.D., The Divinity School, University of Chicago.

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B.A., Ohio University; M.A., Ph.D., Ohio State University.

JOSEPH K. WOODARD, *Assistant Professor of Philosophy and History.* (1989).

B.A., University of Alberta; M.A., Dalhousie University (Nova Scotia); M.A. St. John's College; Ph.D., Claremont Graduate School.

Instructors

MICHAEL SCHMICH, *Instructor in Foreign Languages.* (1986).

Padagogische Hochschule, Heidelberg; M.A., West Virginia University.

THOMAS E. KELLY, *Instructor in Accounting.* (1987).

B.S., M.B.A., University of Steubenville.

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B.A., University of Pittsburgh; M.S.L.S., Clarion University.

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B.A., Marquette University; M.A., University of Florida.

Professional Staff with Instructional Responsibilities

RUTH L. WESTLAKE, *Lecturer in Communications*. (1975).

B.A., Kent State University; Ohio University.

JAMES A. ZALACCA, *Director of Athletics, Head Men's Basketball Coach, and Director of Intramural Athletics*. (1982).

A.A.S., Genesee Community College; B.S., Brockport State University; M.A.T., DePauw University.

BETH A. DAMEIER, *Lecturer in Music*. (1983).

B.A., B.M.E., Wartburg College; M.A., University of Iowa.

LISA CAMPANELL-KOMARA, *Coordinator of Women's Athletics, Head Women's Basketball and Volleyball Coach, and Instructor in Physical Education*. (1985).

WILLIAM M. INGEMI, *Athletic Trainer and Lecturer in Physical Education*. (1985).

B.S., Virginia Commonwealth University; M.S., West Virginia University.

PATRICK A. CONDRON, *Catholic Chaplain and Lecturer in Religious Studies*. (1987).

M.Div., All Hallows College (Dublin); Notre Dame University.

JANICE L. FORSTY, *Head Field Hockey Coach, Head Softball Coach, and Lecturer in Physical Education*. (1987).

B.S., Slippery Rock State College; M.S., Slippery Rock University.

CHRISTINE M. SAMPSON, *Director of Special Advising and Lecturer in Education*. (1987).

B.A., West Liberty State College; M.A., West Virginia University.

MARGARET P. HERMELING, *Director of Student Counseling Services and Director of Developmental Studies*. (1988).

B.A., DePauw University; M.Ed., Miami University.

W. SCOTT LUCKHARDT, *Technical Director of the Bethany Theatre*. (1989).

B.A., Bethany College; M.F.A., Temple University.

BRAD R. WARNIMONT, *Head Baseball Coach, Assistant Football Coach, and Lecturer in Physical Education*. (1989).

B.A., Ohio Wesleyan University; M.A., Ohio State University.

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A.B., New York University; M.H.L., Hebrew Union College (New York); D.D., Hebrew Union College (Cincinnati).

STEVE T. GRAMMEN, *Lecturer in Accounting*. (1983).

B.A., Washington and Jefferson College; CPA.

D. DAVID STILES, *Lecturer in Music*. (1986).

B.A., West Liberty State College.

MARK and JOYCE CHERNENKO, *Co-Lecturers in Business Law*. (1987).

B.A., Bethany College; Jus.D., West Virginia University.

ROBERT Y. YANG, *Lecturer in Physics*. (1989).

B.S., Fudan University (China); M.S., Polytechnic Institute of New York; Ph.D., Polytechnic University.

ADVISORS

For Fields of Concentration

Accounting	Thomas E. Kelly
Biology	John T. Burns
Chemistry	Milton R. Smith, Jr.
Communications	Harold C. Shaver
Computer Science	James E. Allison
Economics and Business	Donald L. Eilenstine
Education	Ann C. Shelly
English	John R. Taylor
Fine and Applied Arts	David J. Judy
Foreign Languages	Pauline R. Nelson
Health Science	Gary E. Larson
History.....	William L. Young
Interdisciplinary Studies	Anthony L. Mitch
Mathematics	James E. Allison
Philosophy	Robert E. Myers
Physical Education	John J. McGowan
Physics	Majid A. Sawtarie
Politics and Public Policy	Albert J. Ossman, Jr.
Psychology	John H. Hull, T. Gale Thompson
Religious Studies	Frank H. Gorman, Jr.
Science Applications	Milton R. Smith, Jr.
Sociology and Social Work	Lynn F. Adkins

For Career Interests

Advertising	James W. Carty, Jr.
Dentistry	Gary E. Larson
Drama	David J. Judy
Engineering	Majid A. Sawtarie
Law	Albert J. Ossman, Jr.
Medicine	Gary E. Larson
Ministry	Frank H. Gorman, Jr.
Newspaper	Joe M. Lesem
Public Relations	Harold C. Shaver
Radio	Patrick J. Sutherland
Social Work	Lynn F. Adkins
Teaching	Ann C. Shelly
Television	Russell J. Cook
Veterinary Medicine	Gary E. Larson

For Practicum Program

T. Gale Thompson

For Professional Core Program

Donald L. Eilenstine

For Special Services

Counseling	Margaret P. Hermeling
Career Counseling	Donald L. Eilenstine
	John D. Davis
	W. Randolph Coeey
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Graduate Fellowships, Scholarships	Robert E. Myers
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Social Security and Veterans' Benefits	John C. Giesmann
Social and Recreational Activities	Darline B. Nicholson
Special Advising	Christine Sampson
Transfer Students	Robert A. Paysen
Undergraduate Scholarships	Theodore W. Bunnell, Beth Dameier
Writing	Robyn R. Cole

FACULTY COMMITTEES

Student members are appointed annually to many of the following committees by the President of the college upon recommendation of the Student Board of Governors.

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ADMISSION

Milton R. Smith, Jr. (Chair); Albert R. Buckelew, Jr.; Robyn R. Cole; John U. Davis; David J. Judy; Harold C. Shaver; Thomas H. Stein (Dean of Admission); T. Gale Thompson.

ATHLETICS

Donna F. Keith (Chair); Lisa Campanell-Komara (Coach); John S. Cunningham (Vice President for Student Services); John U. Davis (NCAA Representative); John J. McGowan (Coordinator of Academics in the Department of Physical Education, Coach); Wallace B. Neel (Coach); Michael Schmich; James A. Zalacca (Athletic Director, *ex officio*).

CAMPUS MEDIA

Harold C. Shaver (Chair); James W. Carty, Jr.; Russell J. Cook; Walter L. Kornowski; Joseph M. Lesem; Patrick J. Sutherland; John R. Taylor; Ruth L. Westlake (Director of Public Information and Publications).

COMPUTER ADVISORY

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CURRICULUM

Richard M. Bernard (Dean of the Faculty, Chair); Donald L. Eilenstine; Gary H. Kappel; John C. Krug; Anthony L. Mitch; Ann C. Shelly; Milton R. Smith, Jr.; John C. Giesmann (Registrar, *ex officio*).

DEVELOPMENTAL STUDIES

Margaret Hermeling (Director of Developmental Studies, Chair); James E. Allison; Robyn R. Cole; Christine Sampson; T. Gale Thompson; Dorothy K. Wamsley; Sheryl L. Reddy (Associate Dean of Admission, *ex officio*).

FACULTY BUDGET

W. Randolph Cooley (Social Sciences, 1990); Katherine S. Coram (At-Large, 1990); Francisco Romero Perez (Humanities, 1991); C. Kent Clinger (Sciences, 1992); Pauline R. Nelson (Faculty Representative to the Board of Trustees).

FACULTY DEVELOPMENT

Gary H. Kappel (Chair); John H. Hull; David J. Judy; Pauline R. Nelson; Francisco Romeo Perez; Majid A. Sawtarie.

FACULTY PERSONNEL

James E. Allison (Sciences, 1990); Pauline R. Nelson (At-Large, 1991); Ann C. Shelly (Social Sciences, 1991); Anthony L. Mitch (Humanities, 1992); Robert E. Myers (At-Large, 1992).

FACULTY WELFARE

John U. Davis (1990); Joseph M. Lesem (1990); John D. Davis (1991); Gary H. Kappel (1991); John T. Burns (1992); Katherine S. Coram (1992).

GANS FUND

Majid A. Sawtarie (Chair); James E. Allison; Stanley L. Becker; John T. Burns; Arlene H. Little; Milton R. Smith, Jr.

HEALTH PROFESSIONS ADVISORY

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Robert E. Myers (Chair); C. Kent Clinger; Donald L. Eilenstine; Walter L. Kornowski; Darline B. Nicholson (Dean of Student Life); Albert J. Ossman, Jr.; John R. Taylor; John C. Giesmann (Registrar, *ex officio*).

INSTITUTIONAL ANIMAL CARE AND USE

John T. Burns (Chair); Robyn R. Cole; W. Randolph Cooley; John H. Hull; Joseph M. Kurey (Chief Business Officer); Michael J. Miller (D.V.M.); Penny Miller (Curator, Oglebay Zoo).

INTERDISCIPLINARY STUDIES

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INTERNATIONAL EDUCATION

Pauline R. Nelson (Chair); Ahmad Khalili; Gary E. Larson; John W. Lozier; Mark W. MacWilliams; Majid A. Sawtarie; Michael Schmich.

JANUARY TERM

W. Randolph Cooley (Chair); John C. Giesmann (Registrar); Mark A. Krause; John C. Krug (Director of the Library); Joseph M. Kurey (Chief Business Officer); John T. McGowan; Anthony L. Mitch; Darline B. Nicholson (Dean of Student Life).

JAPANESE CULTURE

Fujiko O. Sawtarie (Chair); Thomas E. Kelly; Gary E. Larson; John W. Lozier; Mark W. MacWilliams; Robert C. Nolan (Vice President for Development, *ex officio*).

LIBRARY

John W. Lozier (Chair); John D. Davis; Mildred K. Galentine; David D. Hill; Lana H. Landon; Albert J. Ossman, Jr.; Robert A. Paysen; Francisco Romero Pérez; John C. Krug (Director of the Library, *ex officio*).

PRACTICUM REVIEW

T. Gale Thompson (Chair); C. Kent Clinger; Robyn R. Cole; Russell J. Cook; John D. Davis; David J. Judy; Mark A. Krause; Joseph M. Lesem; Wallace B. Neel.

RELIGIOUS LIFE

James E. Allison (Chair); James W. Carty, Jr.; Frank H. Gorman, Jr.; Lana H. Landon; Mark W. MacWilliams; Robert E. Myers; Wallace B. Neel; James A. Zalacca; Patrick A. Condrón (Catholic Chaplain, *ex officio*); Jerald E. Fuqua (Director of Church Relations, *ex officio*); Daniel Harry (Chaplain, *ex officio*).

SCHOLARSHIP

John U. Davis (Chair); Theodore W. Bunnell (Director of Financial Aid); Robert E. Myers; Robert C. Nolan (Vice President for Development); Fujiko O. Sawtarie.

SOCIAL WORK ADVISORY

Lynn F. Adkins (Chair); John T. Burns; Katherine S. Coram; Ahmad Khalili; Albert J. Ossman, Jr.; Michael Schmich; Ann C. Shelly.

STUDENT LIFE

Michael Schmich (Chair); Lynn F. Adkins; James E. Allison; John S. Cunningham (Vice President for Student Services); John D. Davis; Janice L. Forsty; Frank H. Gorman, Jr.; Wallace B. Neel; Darline B. Nicholson (Dean of Student Life); Fujiko O. Sawtarie.

TEACHER EDUCATION

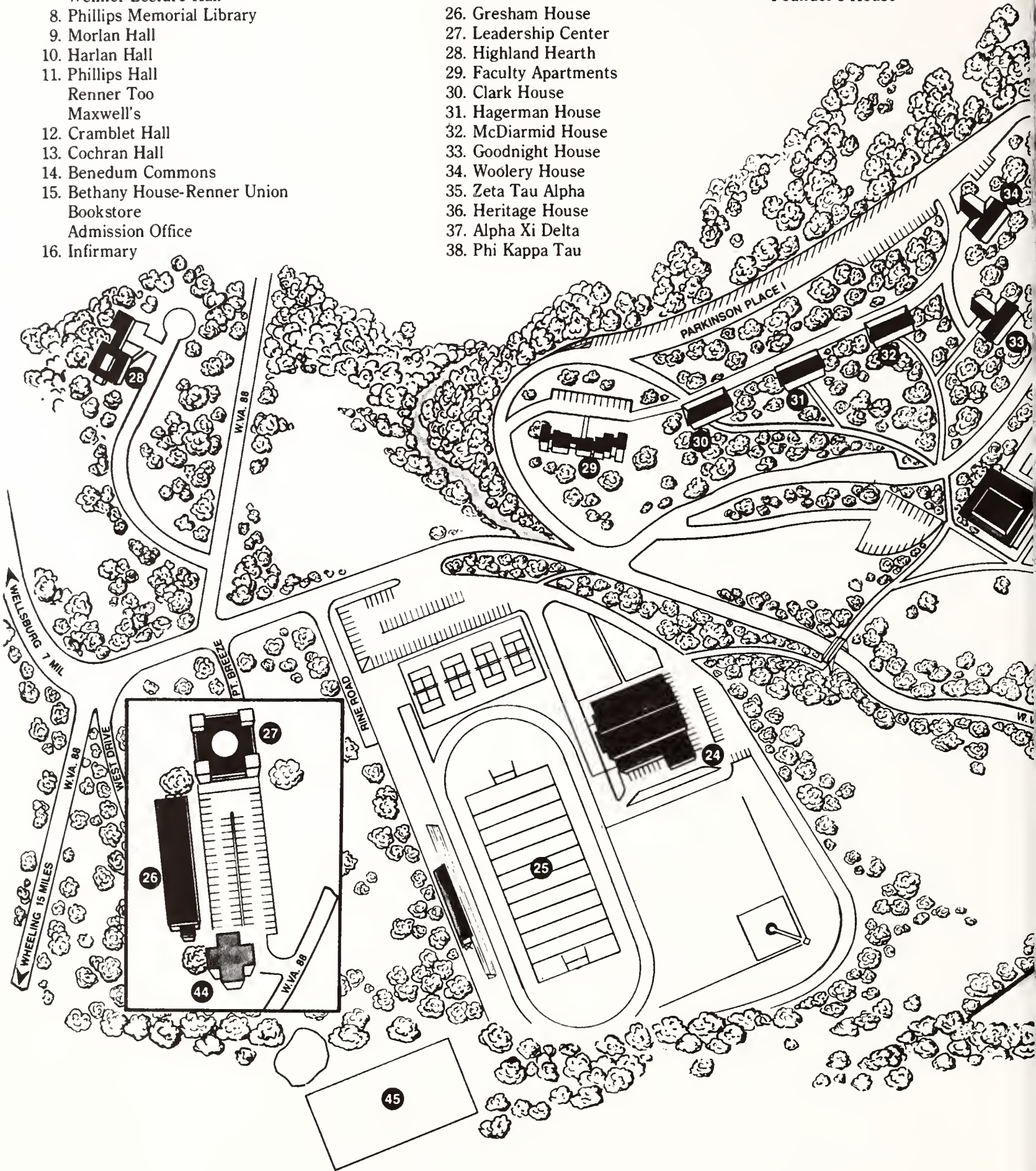
Ann C. Shelly (Chair); Stanley L. Becker; Richard M. Bernard (Dean of the Faculty); Robyn R. Cole; John U. Davis; Donna F. Keith; John J. McGowan; Dorothy K. Wamsley.

Bethany

1. Pendleton Heights
2. Old Main
3. Commencement Hall
4. Oglebay Hall
5. Steinman Fine Arts Center
Wailes Theater
6. Grace Phillips Johnson Visual Arts Center
7. Richardson Hall of Science
Weimer Lecture Hall
8. Phillips Memorial Library
9. Morlan Hall
10. Harlan Hall
11. Phillips Hall
Renner Too
Maxwell's
12. Cramblet Hall
13. Cochran Hall
14. Benedum Commons
15. Bethany House-Renner Union
Bookstore
Admission Office
16. Infirmary

17. McEachern Hall
18. McLean Hall
19. Bethany Memorial Church
20. Campbell Hall
21. Physical Plant
22. Heating Plant
23. Knight Natatorium
24. Alumni Field House
25. Rine Field
26. Gresham House
27. Leadership Center
28. Highland Hearth
29. Faculty Apartments
30. Clark House
31. Hagerman House
32. McDiarmid House
33. Goodnight House
34. Woolery House
35. Zeta Tau Alpha
36. Heritage House
37. Alpha Xi Delta
38. Phi Kappa Tau

39. Kappa Delta
40. Phi Mu
41. Weimer Nature Trail
42. Amphitheater
43. Oglebay Gates
44. Harder Hall
45. Athletic Field
46. Delta Tau Delta
Founder's House





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Notice of Nondiscrimination Policy

Bethany College admits students of any race, color, sex, religion, handicaps, and national or ethnic origin to all of the rights, privileges, programs and activities generally accorded or made available to students at the school. Bethany does not discriminate on the basis of race, color, sex, religion, and national or ethnic origin in the administration of its educational policies, scholarship and loan programs, athletic activities or other school-administered programs.

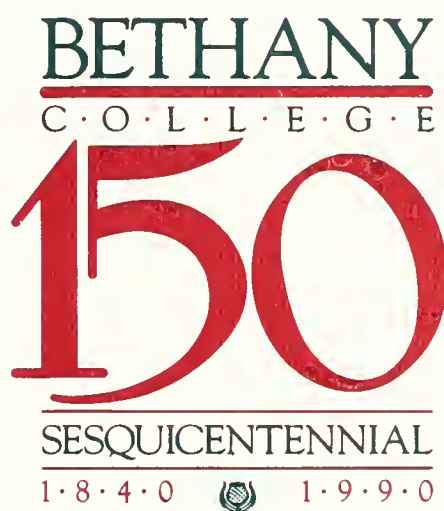


Bethany College
 Bethany, West Virginia 26032
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Bethany

College Bulletin 1990-1991

Summer 1990



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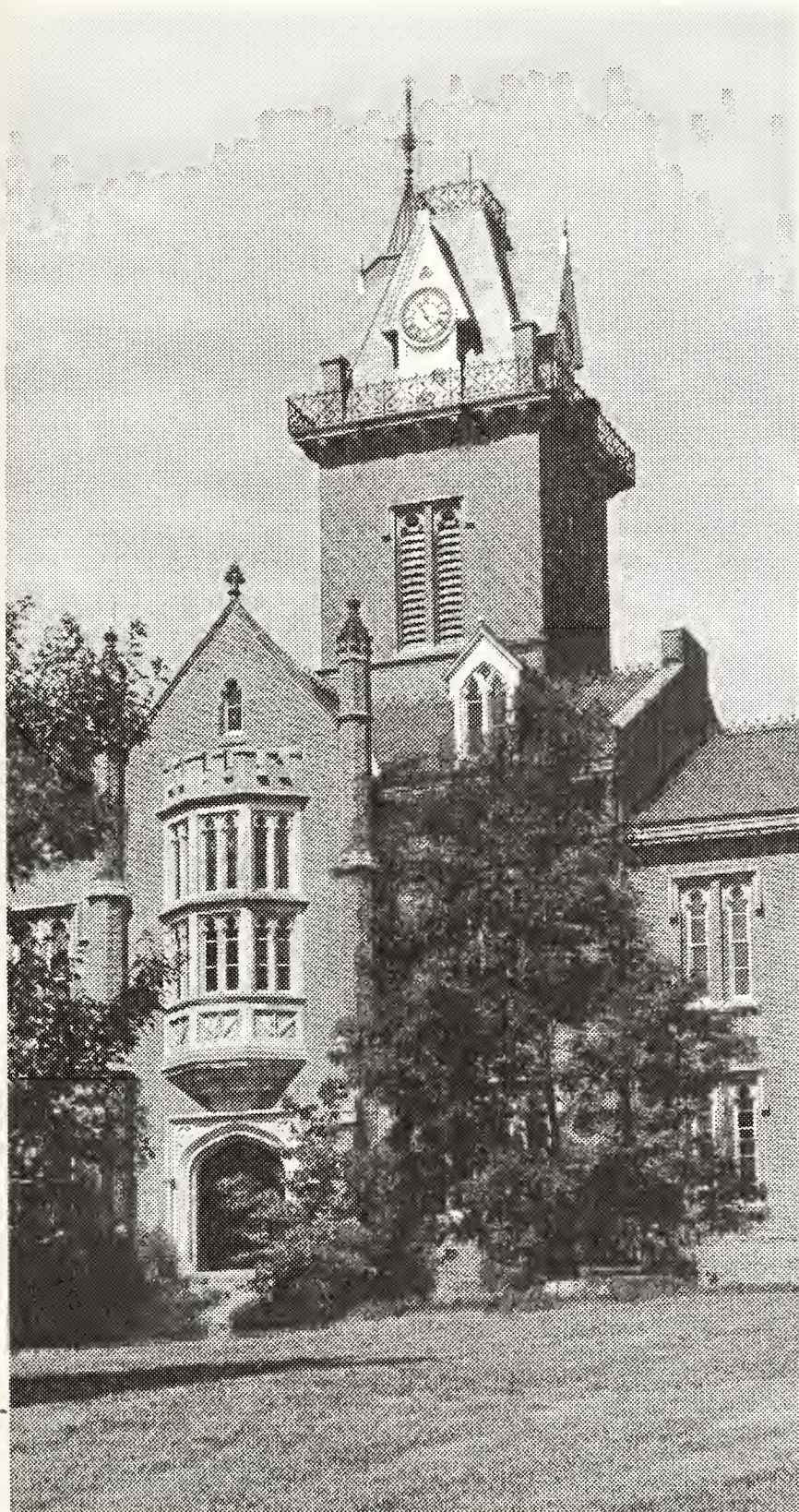


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College Calendar 1990 - 1991

The Bethany calendar includes two 15-week semesters and a four-week voluntary interim session in January. The fall semester is from early September to before Christmas. The spring semester is from February through May. Some courses are offered over the full semester while others are for the first or second half semester. This division provides flexibility for students to do off-campus study and internships.

The four weeks in January are for students to use in intensive study on campus or for off-campus work. Two five-week summer terms and an 11-week summer independent study period are offered.

First Semester

1-4 Saturday-Tuesday	September
4 Tuesday	Orientation and evaluation for new students
5 Wednesday	Registration for returning students
11 Tuesday	First day of classes for all students
	Last day for adjustment of schedules without academic and financial penalty; last day to add a course
13 Thursday	Fall Convocation
15 Saturday	Homecoming
18 Tuesday	Last day to determine credit/no credit

23 Tuesday	October
	Last day of classes for first-half semester courses
24 Wednesday	First day for second-semester courses
26-28 Friday-Sunday	Parents' Weekend
29 Monday	Writing Qualification Test for Freshman Seminars

8 Thursday	November
10 Saturday	Thanksgiving Convocation
12-16 Monday-Friday	Board of Trustees Meeting
16 Friday, 4 p.m.	Pre-registration for second semester
26 Monday, 8 a.m.	Thanksgiving vacation begins Thanksgiving vacation ends

18 Tuesday	December
19 Wednesday	Last day of classes
20-22 Thursday-Saturday	Reading Days
24 Monday	Final examination period Final grades due

January Term

January

7 Monday	First day of classes
18 Friday	Last day of classes for first-two-week courses
21 Monday	First day of classes for last-two-week courses
28-29 Monday-Tuesday	Senior Comprehensive Examination (Written)
30-Feb. 2 Wednesday-Saturday	Senior Comprehensive Examination (Oral)
Feb. 1 Friday	Last day of classes

Second Semester

February

3 Sunday	Registration for all students
4 Monday	First day of classes for all students
8 Friday	Last day for adjustment of schedules without academic and financial penalty; last day to add a course
15 Friday	Last day to determine credit/no-credit

March

1 Friday	Founder's Day and Convocation
14 Thursday	Writing Qualification Test (sophomores and juniors)
22 Friday	Last day of classes for first-half semester courses
22 Friday, 4 p.m.	Spring vacation begins (includes Good Friday and Easter)
26 Tuesday	Mid-term grades due

April

2 Tuesday, 8 a.m.	Spring vacation ends
2 Tuesday	First day for second-half-semester courses
18 Thursday	Honors Day and Convocation
29-May 3 Monday-Friday	Pre-registration for first semester, 1991-92

May

3-5 Friday-Sunday	Alumni Weekend
4 Saturday, 8 a.m.	Reading period for Comprehensives begins
6 Monday	Grades due for student taking Comprehensives
13-14 Monday-Tuesday	Senior Comprehensive Examination (Written)
15-18 Wednesday-Saturday	Senior Comprehensive Examination (Oral)
17 Friday	Grades due for graduating seniors who previously took Comprehensives; last day of classes
18-19 Saturday-Sunday	Reading Days
20-22 Monday-Wednesday	Final examination period
23 Thursday	Final Faculty Meeting
24 Friday	Board of Trustees Meeting
24 Friday, 8 p.m.	Baccalaureate
25 Saturday, 10 a.m.	Commencement
28 Tuesday	Final grades due

Bethany Profile

Bethany was founded March 2, 1840, by Alexander Campbell, educator, Christian reformer, and celebrated debater, who provided land and funds for the first building and served as first president. Now 150 years old, Bethany College is a highly contemporary institution still based in the tradition of the liberal arts.

Since its inception, Bethany has been a four-year private liberal arts college affiliated with the Christian Church (Disciples of Christ). This religious body, of which Campbell was one of the principal founders, continues to support and encourage the College, although it exercises no sectarian control. Students of virtually every religious communion attend Bethany.

The College offers a wide array of studies, awarding bachelor of science or bachelor of arts degrees with majors in Accounting, Biology, Chemistry, Communications, Computer Science, Economics, Education, English, Fine and Applied Arts, French, German, Health Science, History, Interdisciplinary Studies, Mathematics, Philosophy, Physical Education, Physics, Political Science, Psychology, Religious Studies, Science Applications, Social Work, Sociology, and Spanish.

The College's program of liberal education prepares students for a lifetime of work and a life of significance. Bethany places particular emphasis on leadership and incorporates pre-professional education in dentistry, engineering, law, medicine, public administration, theology, and veterinary medicine.

Bethany's 1600-acre campus is located in the northern panhandle of West Virginia in the foothills of the Allegheny Mountains. Pittsburgh is 48 miles to the northeast. Wheeling, W.Va., Washington, Pa., and Steubenville, Ohio, are each a half-hour drive from the College.

The approximately 850 Bethany students represent nearly 30 states and 15 foreign countries. Typically, about one third are from the East coast and the New England states, another one third are from the Mid-Atlantic region, and the remaining one third are from other states and countries.

Goals

In its charter, granted in 1840 by the Commonwealth of Virginia and recognized in 1863 by the newly organized state of West Virginia, the mission of Bethany College is defined as

the instruction of youth in the various branches of science and literature, the useful arts, and the learned and foreign languages.

Alexander Campbell, Bethany's founder and first President, viewed the College's mission as stated in the charter in the context of the Judaeo-Christian tradition and the thinking of the American Enlightenment, interpreting it to imply the educating of students to become useful and responsible members of society by liberating them from superstition and ignorance, the tyranny of others, and "vulgar prejudices."

Bethany College continues to accept the implications of its mission as understood by its founder. It continues to accept the responsibility for nurturing effective, honorable, humane, and intelligent citizens who believe in and will promote the creation of a world of worth and value, integrating critical reason and the spiritual dimensions of life, personal accomplishment and ethical responsibility, and individual development and service to others. It continues to accept the responsibility for promoting the development of responsible members of society who

- are marked by a rigorous, developed intellect and substantial knowledge
- are sensitive and responsive to persons, events, issues, and people in the world around them
- become involved with and sensitive to persons, events, issues, and problems
- assume responsibility for and accept the consequences of their involvement
- humanize and make effective the institutions they affect
- are motivated to nurture and serve the persons around them
- assist in the clarification and resolution of issues and problems of the world
- know themselves and develop an examined system of ethics and values
- possess the basic skills and insights needed to undertake these tasks

The Bethany educational program is designed to implement the College's mission. It encourages students to realize their intellectual capabilities, moral capacities, and leadership potential by assisting them as they strive to fulfill each of the following specific goals:

- to discover how to acquire, evaluate, and use knowledge
- to master skills of communication
- to cooperate and collaborate with others in study, analysis, and formulation of solutions to problems
- to understand contemporary issues and events
- to analyze personal values, to perceive and to deal sympathetically with the values of others, and to be open to the continued evaluation of both
- to make progress toward the selection of and the preparation for a vocation
- to integrate the various experiences of life and to see the relationship of the college experience to future development as a responsible citizen

Accreditation, Memberships

Bethany College is accredited by or holds memberships in:

- North Central Association of Colleges and Secondary Schools
- Association of American Colleges
- American Council on Education
- American Association for Higher Education
- College Entrance Examination Board
- Council on Social Work Education
- American Association of Colleges for Teacher Education
- National Council for the Accreditation of Teacher Education
- Council of Independent Colleges
- Division of Higher Education of the Christian Church (Disciples of Christ)
- Women graduates are eligible for membership in the American Association of University Women

Admission

Application

Bethany accepts applications for admission from candidates who feel they would contribute to and benefit from a Bethany education. Admission is based on a careful review of all credentials presented by the candidate. The Committee on Admission accepts candidates it considers best qualified among those applying. In no case does the meeting of minimum standards assure admission. Acceptance is contingent upon a candidate's successful completion of secondary school.

The College seeks students who have prepared themselves for a liberal arts curriculum by taking at least 15 units of college-preparatory work. Although the College does not absolutely prescribe how these units should be distributed, it encourages a minimum of four years of English, three years of mathematics, three years of science, three years of social science, and at least two years of a foreign language. For students who have developed individual curricula or are involved in experimental honors programs, the Committee on Admission makes special evaluations.

Freshmen

Application for admission requires the submission of the following: a completed application form; a transcript of secondary school work; two letters of reference; scores from either the College Entrance Examination Board Scholastic Aptitude Test (SAT) or the American College Testing Program (ACT). An on-campus interview is recommended, but not required.

Candidates for admission may also submit other materials in support of their applications, such as examples of poems, plays, or short stories that they have written, samples of their art work or photography, journalistic pieces they have had printed, programs indicating their musical or dramatic endeavors, or clippings depicting activities for which they have received recognition.

Two plans for admission are available:

The Rolling Admission Plan enables Bethany's faculty Committee on Admission to evaluate and act on completed applications as soon as they are submitted. Therefore, each applicant is notified of Bethany's decision approximately two weeks after all credentials have been received. Candidates for admission under this plan are advised to apply early in the Senior year.

The Early Decision Plan is offered for those wishing to determine their college as early as possible and for whom Bethany College is the first choice. Under this plan the candidate must apply by December 15 and submit an Early Decision Agreement Form with the application materials. The candidate for admission will be notified of Bethany's decision by January 15. The Early Decision Agreement obligates a candidate who is admitted to enroll at Bethany and withdraw any applications submitted to other institutions. A candidate for financial aid is bound by this obligation if the need for financial aid has been met satisfactorily.

The application for admission and the acceptance are valid only for the academic year for which the application has been made.

Transfers

The College welcomes well-qualified transfer students. Applicants for transfer must have had a good academic record in the institution attended and must present full credentials for both college and preparatory work, including a statement of honorable dismissal that is to be completed by the dean of students of the prior institution. They must take the Scholastic Aptitude Test (SAT) given by the College Entrance Examination Board or the American College Test (ACT) if this test has not been taken previously. A copy of the catalog from the school previously attended must also be submitted.

One year of study at Bethany College constitutes the minimum requirement for a degree. Applications for transfer must be submitted before August 1 of the year in which entrance is desired. Decisions on these applications are announced by August 15. Application for transfer at mid-year must be received by January 15. Financial assistance is available for transfer students.

Community/Junior College Graduates

Students who have received or will receive an Associate in Arts or Associate in Science Degree and find Bethany's curriculum suited to their educational goals are encouraged to apply.

Holders of the A.A./A.S. Degree who are accepted receive at least two years (minimum 60 hours) credit, enter as juniors, and receive all the rights and privileges of upperclass students.

The College will make every effort to assist holders of Associate degrees to complete their baccalaureate programs within two years at Bethany. However, some fields of concentration may require more than 68 additional hours beyond the 60 referred to above, depending on the type of Associate's program the student has completed.

Special Advising

The Special Advising Program provides a comprehensive set of services specifically designed to support the learning disabled student in the college mainstream. The program focuses upon developing skills which will maximize the student's independence for lifelong learning.

In order to participate in a part of the Special Advising Program, a student must first be admitted to Bethany College. In addition to the application, high school transcript, recommendations, and SAT or ACT scores (scores on non-standard tests are also accepted), the student must submit full documentation of the learning disability and participate in an on-campus interview. Additional fees are assessed each semester for participation in the Special Advising Program.

Early Admission

Some students complete their secondary school graduation requirements a year early and decide to enter college after their junior year. For those who have demonstrated maturity and show evidence of a strong academic background, Bethany offers a program for early admission. For early admission, the usual admission procedures must be followed. In addition, the student must have an interview on campus and the student's high school counselor must confer with a Bethany admission officer.

Advanced Placement

Students may receive advanced placement and/or credit from any department in the College through a testing program. This must be accomplished before the end of the first year at Bethany College. Those who wish to receive credit by examination should consult with the Office of Career and Professional Development and the chair of the appropriate department.

Credit may be received or courses waived as a result of high scores on the College Entrance Examination Board Testing Program for Advanced Placement. The waiving of courses or granting of credit, however, are departmental matters and require consultation with the chair of the appropriate department after matriculation.

Visiting Bethany

Although not required, an on-campus interview with an admission officer is highly recommended. A campus visit will enable the student to develop more thorough understanding of the College and its expectations. A comprehensive tour, observation of classes, and interaction with Bethany students and faculty are available if desired by the applicant.

Prospective students are also invited to remain overnight as the guest of a Bethany student. Meals and overnight accommodations in College housing for prospective students are provided by the College. Arrangements may be made through the Admission Office. Lodging for parents is available on campus at Gresham House, as well as nearby lodges and motels. Transportation arrangements from the Greater Pittsburgh International Airport, as well as from the Pittsburgh rail and bus terminals, may be arranged through the Admission Office.

The Admission Office is open Monday through Friday from 8:30 a.m. to 4:30 p.m. and Saturday from 9 a.m. to 1 p.m. throughout the year. Appointments may be made by calling 304-829-7611 or 800-922-7611, or by writing the Admission Office, Bethany College, Bethany, West Virginia 26032. Three days advance notice is necessary to

make proper arrangements.

Information on admission and registration fees, as well as details on expenses, aid, and scholarships are on pages 6-13 and 27-35.

Foreign Students

Bethany encourages applications from residents of other countries. Approximately 15 countries are represented on campus each year.

Students from non-English-speaking countries are required to submit, along with an application for admission, a complete secondary school transcript, the results of the American College Testing Program (ACT), the College Entrance Examination Board Scholastic Aptitude Test (SAT), or the Test of English as a Foreign Language (TOEFL), and at least two letters of recommendation. Applicants for the Fall Semester must submit these materials by May 1.

Foreign students are also requested to complete a Foreign Student’s Financial Aid Application and Declaration. This form is to be returned with admission materials by the deadline mentioned. Although Bethany is willing to review requests for financial assistance, funds are limited.

Application for Admission

A non-refundable \$20 fee is required at the time of formal application.

Application for Readmission

Students previously enrolled in Bethany College who wish to return for additional work must file an Application for Readmission with the Registrar’s Office. A \$5 fee is required at the time such application is made.

Registration Deposit

A student accepted for admission or readmission is required to pay a \$100 registration deposit. This deposit is refunded after graduation or when one of the following procedures is completed: 1) a student accepted for admission who has paid the registration deposit but decides not to attend Bethany submits a request in writing for the refund before May 1 prior to the intended matriculation; 2) a matriculated student who withdraws from Bethany gives written notice to the Business Office prior to the advance enrollment date for the next regular term.

Matriculation Fee

A \$20 fee is required of every new student to cover part of the cost of orientation and evaluation procedures for new students.

Expenses, Aid

Bethany College is a non-profit institution. Tuition, fees, and other general charges paid by the student cover approximately two-thirds of the College's instructional and operational expenses. The remainder comes from income from endowment funds and from gifts and contributions. Bethany continues to keep costs as low as possible.

Charges and fees stated on the following pages apply only to 1990 - 1991.

Comprehensive Charges

Comprehensive charges for the 1990-1991 year at Bethany include the following:

Tuition and Fees	\$10,695
Room (Double Occupancy)	\$1,430
Board	\$2,260
Student Board of Governors	\$220

The charge for tuition and fees includes tuition and the following activities and services: athletics, health service, library, lectures, plays, concerts, publications, student union, student activities, and laboratory services with the exception of music and art.

No reduction is made in student accounts for course changes made after the first two weeks of the semester. Bethany reserves the right to change, without advance notice, the price for room, board, and health insurance.

Financial Aid

Bethany believes that the funding of a student's education is primarily a family responsibility. However, financial assistance is available to those students whose resources will not fund a Bethany education and yet sincerely desire to attend. Outstanding students, regardless of demonstrated need, frequently receive scholarships and grants to attend the College. Several programs are available to such students.

All need-based aid is awarded through careful evaluation of the Financial Aid Form (FAF) available from the student's guidance counselor. Designation of Bethany College as an institution to receive the processed information is required. All applicants for admission to Bethany are sent detailed information and instructions regarding the financial aid application and awarding processes.

Because of the large number of applications for financial aid, assignment of funds is made according to the date the Financial Aid Form (FAF) is received by College Scholarship Service. April 1 is the priority deadline for all new students. March 1 is the deadline for all returning students. The earlier a student completes all admission materials and all financial aid materials, the sooner financial aid awards can be determined.

A financial aid applicant whose need for assistance has been confirmed through a review of the Financial Aid Form will have the need met through a variety of financial aid resources, including scholarships, grants, loans, and College employment. The student has the option of accepting any or all of the aid offered. A student receiving an offer of financial assistance may discuss any problems arising from the offer with an officer of the College. The Admission Office or the Financial Aid Office helps to arrange these interviews.

Fees for Programs of Study Abroad

- Heidelberg:** \$5,350 for one semester, includes tuition and fees, stipend to sponsor in Germany, and round-trip air fare.
- Oxford:** \$7,700 for one semester for tuition and fees, room and board, and activity fees.
- Paris Sorbonne:** \$5,350 for one semester, includes tuition and fees, stipend to sponsor in France, and round-trip air fare.
- Spain:** \$5,350 for one semester, includes tuition and fees, stipend to sponsor in Spain, and round-trip air fare.

Academic Fees

Each academic hour when fewer than 12	\$404
Each academic hour in excess of 16	\$348
Auditing a course, per semester hour	\$348
<i>(a student is not charged if paying regular tuition and fees and the total program, including the audit, does not exceed 18 hours.)</i>	
Comprehensive Examination	\$35
Graduation Fee	\$50
Matriculation Fee	\$20
Academic Support Services <i>(per semester)</i>	\$250
Special Advising Fee <i>(per semester)</i>	\$375 to \$1,000
Special Examinations in any department	\$20
Each credit-hour awarded by examination	\$20
Late registration <i>(per day)</i>	\$3

Course Fees

Chem. 490	\$20
Ed. 470: off-campus teaching <i>(per semester)</i>	\$5,643
<i>(includes tuition, fees and pre-school week board privileges in the Bethany dining hall)</i>	
Eng. 160	\$15
FAA 153	\$10
FAA 155	\$15
FAA 201	\$5
FAA 203	\$20
FAA 210	\$25
FAA 213	\$15
FAA 214	\$15
FAA 215	\$15
FAA 310	\$15

FAA 313	\$15
FAA 316	\$15
P.E. 340	\$30

Music Fees

Instrument rental (<i>per semester</i>)	\$10
Organ practice, one hour daily (<i>per semester</i>)	\$35
Piano practice, one hour daily (<i>per semester</i>)	\$10
Private music lessons, one half-hour weekly (<i>per semester</i>)	\$100

Special Fees

Special Room Rates	
Single	\$800
Double as Single	\$1,000
Key deposit for dormitories	\$20
(<i>refund if key is returned</i>)	
Infirmary charge per day	\$5
(<i>after the first three days each semester</i>)	
Automobile Registration	\$20
Health Insurance	\$90

Breakage Deposit

Chemistry and physics breakage deposits are covered by a \$10 breakage card which the student purchases each semester for every laboratory course in which the student is enrolled. In the event breakage exceeds \$10, an additional \$10 breakage card must be purchased. Unused portions are refunded at the end of each academic year.

Payment of Student Accounts

By registration, an invoice listing all charges due for the following semester is prepared for each student.

Bethany College bills for tuition, fees, room, and board twice yearly; other charges are billed as incurred. Twice yearly billings are payable in advance by August 15 and January 15 for the fall and spring semesters respectively. Scholarships and loans may be applied as credit against August or January payment requirements.

Students will not be permitted to register if the payment requirements for each semester are not met. These requirements are in addition to the registration deposit. Checks or drafts should be made payable to Bethany College.

Students may not take final examinations, receive academic credit, obtain transcripts, or graduate until satisfactory arrangements are made to cover financial obligations.

For accounts past due a monthly service charge of 1.5% on the first \$1,500 (18% per year) and 1% on any remaining balance (12% per year) will be charged as of the 25th of each month.

Monthly Payment Plans

Bethany has made arrangements with the Tuition Management Systems Plan and Academic Management Services whereby student accounts may be paid on a monthly basis during the year. Arrangements to use this plan should be made prior to the registration period. Information may be obtained by writing to the Bethany College Business Office.

Student Drawing Account

The Business Office provides a limited banking service through which students may deposit funds and draw on them as required. Students or their parents may make deposits to the student drawing account which is recommended to avoid the necessity of keeping on hand any substantial amount of money. All checks for this account must be made payable to the Bethany College Student Drawing Account.

Withdrawals and Refunds

After registration, there is no refund of room charges or fees. A student voluntarily withdrawing or withdrawing because of illness during the course of the semester will be charged 10 per cent of tuition charges for each week of attendance or part thereof. There is no refund of tuition after the tenth week of attendance. There is no refund in the event that a student is dismissed or asked to withdraw during the course of the semester. Board refund is prorated, based upon food costs only. Special fees are not refundable.

A student wishing to withdraw from Bethany must file written notice with the Dean of Students to qualify for refund of deposit and adjustment of other charges.

Academic Programs

Based in the liberal arts tradition, Bethany's academic program is designed to meet the educational needs of individual students by providing breadth, depth, and the integration of knowledge. Bethany has devised its program of study to assist students to develop intellectual concepts, sophisticated learning skills, moral values, and good citizenship. Preparation for leadership is a central theme of the College.

The Bethany curriculum is unique in caring for the individual students and in helping them develop their full potential at each level of learning. From Freshman Seminars to Senior Comprehensive Examinations, Bethany prepares its students for ever greater tasks and achievements, guiding them toward the fulfillment of personal goals, the challenges of graduate study, and the preparation for productive and rewarding careers.

Bethany brings its students a rich variety of opportunities for learning. Seminars, lectures, laboratory and independent research projects, encounters with high technology

through the use of state-of-the-art television and graphics equipment, artistic performances, and athletic activities present opportunities for self-expression and growth in the arts, in communication, and in athletics. Learning at Bethany often takes place outside traditional classroom settings, through informal interaction with faculty, off-campus internships, and study abroad.

A Bethany education is, then, more than a list of courses. Bethany students approach their study through a framework of common educational goals which define the liberally educated person. Faculty members work closely with all students to ensure a proper grounding in the humanities, sciences, and social sciences. Bethany students have many opportunities for choice; but here, too, faculty work closely with them to ensure that each student's personal plan of study is both comprehensive and coherent. It is this combination of thoroughness and personal expression that makes Bethany unique.

Requirements for a Bethany Degree

The Bachelor of Arts and Bachelor of Science degrees are conferred by Bethany College upon students who have satisfactorily completed the following requirements:

- 128 semester hours with a minimum grade point average of 2.00000 including the following:
 - a Freshman Seminar
 - Interdisciplinary Studies 100
 - Religious Studies 100
 - the Perspective Program
 - a Major Field of Study
- the Practicum Program
- the Writing Proficiency Requirement
- a senior project in the major field
- the senior comprehensive examination in the major field
- the residence requirement
- participation in commencement exercises

Bachelor of Arts degrees are awarded in Accounting, Communications, Computer Science, Economics, Education, English, Fine and Applied Arts, French, German, History, Interdisciplinary Studies, Philosophy, Physical Education, Political Science, Psychology, Religious Studies, Social Work, Sociology, and Spanish. Specific requirements for each major are described in the sections of this **Bulletin** devoted to the offerings of the individual academic departments.

Bachelor of Science degrees are awarded in Biology, Chemistry, Computer Science, Health Science, Interdisciplinary Studies, Mathematics, Physics, Psychology, and Science Applications. Specific requirements for each major are described in the sections of this **Bulletin** devoted to the offerings of the individual academic departments.

Freshman Program

Freshman Seminar: Each freshman is required to enroll in a Freshman Seminar during the fall semester. The faculty member who directs the seminar also serves as the student's academic advisor. (A student transferring to Bethany more than 12 semester hours of credit from another college is exempted from the Freshman Seminar.)

Freshman Interdisciplinary Course: Each freshman is required to enroll in I.S. 100, *Origins of Western Thought*, during the spring semester. (A student transferring to Bethany at least 60 semester hours of credit from another college is exempted from the Freshman Interdisciplinary Studies course.)

Academic Advisor

The student-advisor relationship is a vital aspect of the Bethany education. All students are responsible for knowing all requirements for graduation from Bethany College and understanding their progress toward fulfilling those requirements.

Students and advisors work closely together to develop appropriate classroom and experience-based programs of study. Freshmen interact with their advisors twice each week during the first semester’s freshman seminar and privately at other times. Before pre-registration during the second semester of the sophomore year, students are required to select a major. At that time they are assigned to an advisor associated with their areas of interest.

In addition to academic advisors designated for freshmen and for majors, advisors are available to help students with information concerning career interests, and for specific services such as campus employment, counseling, graduate programs, testing, scholarships, foreign students, writing, and vocational guidance. Lists of advisors appear on page 122.

Perspectives Program

In addition to the accumulation of knowledge in a wide variety of disciplines, all Bethany graduates are expected to develop perspectives on their world, each of which is, in appropriate ways, systematic, ethical, and integrative. These perspectives are historical, international, aesthetic, scientific, quantitative, social, and personal.

All courses within the Perspectives Program address three overarching concerns of liberal learning: 1) systematic issues of critical thinking about the basic assumptions, methodologies, and frames of reference of the subject field; 2) ethical issues within the disciplines studied; 3) integrative issues designed to assist the student in gaining a personal perspective or point of view about the world as seen through the examined perspective.

To this end, every student must complete at least four hours chosen among the courses in each of the perspectives categories listed below, plus at least four additional hours, for a total of thirty-six hours in the program. Students may receive approval to substitute credit by examination for the four additional hours.

The list of approved courses changes each year. Only courses taken in the year they appear on the approved list will count toward fulfillment of the requirement.

Historical Foundations: *to achieve an understanding of the methods used to analyze the process of change over time, the agents which effect those changes, and the relationship of past to present*

English 266; Fine and Applied Arts 103; History 201, 202, 301, 302; Interdisciplinary Studies 251, 252; Philosophy 333; Physical Education 244; Religious Studies 150.

International Understanding: *to gain an understanding of the world’s diversity and the variety of cultural responses to common human experiences*

Communications 403; Economics and Business 260, 270; English 268; French 110, 120, 230, 240, 241, 313; General Sciences 202; German 110, 120, 230, 240, 241, 312; History 101, 102, 426; Interdisciplinary Studies 201, 202, 203, 204;

Japanese 110, 120; Philosophy 335; Religious Studies 221, 240, 245; Sociology 256; Spanish 110, 120, 230, 240, 241, 310, 311.

Aesthetic Awareness: *to develop an understanding of the aesthetic principles which influence the creative process in human endeavor*

English 140, 150, 160, 263, 264, 270, 280, 325, 326, 341, 342; Fine and Applied Arts 101, 102, 104, 120, 140, 200, 201, 211, 212; French 351, 352; German 351, 352; Philosophy 358; Spanish 357, 358.

Life Science: *to learn to investigate the world of living things in the classroom and in the laboratory or field, including models of the interactions within that world and their humanistic implications*

Biology 100, 110, 326; Psychology 100.

Quantitative Reasoning: *to understand analytical and quantitative ways of examining the world*

Computer Science 143, 144, 201, 202; Mathematics 103, 141, 201, 202, 250, 281; Philosophy 123; Psychology 103.

Social Institutions: *to examine the methods utilized by social scientists to analyze the organizing principles, structures, policies, and governing ideas of the institutions of society.*

Communications 101, 402; Economics 200; General Science 101, 210; Philosophy 352; Physical Education 243; Political Science 225, 231, 300; Religious Studies 322, 367; Sociology 100, 205, 210.

Human Personality and Behavior: *to establish insight into the methods, theories, and information used to explain how humans develop, behave, and understand themselves*

Education 201, 202; Philosophy 100, 124, 252, 254, 334, 355; Psychology 324, 325; Social Work 145.

Physical Science: *to learn how to explore the physical world, from atoms to stars, by applying the scientific method in the laboratory, by understanding mathematical models used in the physical sciences, and by considering the place of science in human affairs*

Chemistry 100, 101, 102; General Sciences 100, 103, 201; Interdisciplinary Studies 210; Physics 103, 201, 202.

To satisfy perspective requirements, students must take these courses on a graded basis. Students should not enroll in courses to satisfy the Quantitative Reasoning requirement until they have consulted with their advisors about the results of the freshman diagnostic test in quantitative skills.

Major Field of Study

Every student must select a major field of study from one of the academic departments of the College, from among the faculty-sponsored interdisciplinary programs, or by initiating and developing an individual interdisciplinary program.

Department majors are described in detail in the sections of this **Bulletin** devoted to the offerings of the individual academic departments. Each major requires a minimum of 24 credit hours in courses within the department (exclusive of the senior project) and a maximum of 48 credit hours. Given fields may require up to 24 credit hours in courses from related disciplines.

Faculty-sponsored and student-initiated interdisciplinary majors cross departmental lines. Information about faculty-sponsored majors is available from the office of the Registrar. Information about student-initiated interdisciplinary study is available in the Interdisciplinary Studies section of this **Bulletin** and from the Director of Interdisciplinary Studies. All interdisciplinary programs require the approval of the Faculty Committee on Interdisciplinary Study. All interdisciplinary programs must include between 24 and 72 credit hours (exclusive of the senior project).

Minor Field of Study

Students may include as part of their program of study one or more optional minors. Requirements for minors are described in detail in the sections of this **Bulletin** devoted to the offerings of the individual academic departments. Minors generally require between 16 and 24 hours of directed study in one or more departments.

Practicum Program

Practicums are practical experiences encompassing values Bethany believes to be essential to a complete education. These experiences make a student's academic studies more relevant to the everyday world.

Each student must successfully complete four practicums. They require:

- an experience in responsible citizenship
- a demonstration of an awareness of and involvement in health, physical education, and recreation
- an experience in intercultural living
- an experience in a vocationally oriented activity

Students, with the assistance of the advisor and the Director of Practicums, develop proposals which must meet the guidelines established for each practicum and be approved by the Faculty Practicum Committee. Each student completes an evaluation of the experience after each practicum.

Seniors must complete all proposals by December 15 and all evaluations by April 15 of the graduation year.

Further information is available from the Director of Practicums or the Registrar.

Writing Proficiency Requirement

All students must demonstrate an above-average level of proficiency in expository writing. They may do this by either taking the annual Writing Qualification Test or by satisfactory completion of selected writing courses offered by the English Department. Special arrangements are made for students who transfer from other colleges and transfer students should consult the Department of English immediately upon enrolling at Bethany.

Details on the Writing Qualification Test, including when it is given, as well as information on writing courses from which the student may select, are included under the Writing Proficiency Program section in the English Department, page 67.

Senior Project

Each student must produce a project which conforms to the guidelines and fulfills the requirements of the major department.

Two to eight hours of credit are given after the final evaluation and approval of the project. Scheduling of the project is at the discretion of the department or the student's advisory committee.

The project is evaluated by at least one person in the major other than the student's senior project advisor. The final evaluation is made in consultation with the student and the project is made available to the College community.

Recent projects have included extensive research papers, original computer graphics

work, writing and producing a radio series, laboratory research, directing a play, and creative writing.

Senior Comprehensive Examination

Capping the Bethany education is the Senior Comprehensive Examination. Comprehensive examinations assure the College of qualitative accomplishment and lead the student to a sense of self-confidence and achievement.

A student who has attained senior standing, is completing the requirements for a major and has a GPA of at least 2.00000 in the major is eligible to take the Senior Comprehensive Examination. To take the Examination the student must apply in the office of the Registrar at least two months prior to the first day of the written section of the Examination. The Examination, which is offered in January and in May, is both written and oral. In some majors sections of the Graduate Record Examination are part of or prerequisite to the Senior Comprehensive Examination. The Registrar arranges the oral section as soon as possible after the written section, but in no case more than two weeks later.

Students who have completed all requirements in their majors may take the examination in January with the consent of their advisors. Students failing the examination in January may take it again in May or at any time that it is regularly given within the following twelve months. If the student fails a second time, the student may petition the faculty for a re-examination during the following year. No student may take the examination more than three times.

Students who do unusually well on the Senior Comprehensive Examination are listed at graduation as having "passed with distinction."

Residence Requirement

Students normally require four years to complete all requirements for a degree at Bethany. Sometimes they may complete their work in less time. Regardless of the time taken to finish the degree, Bethany requires that students spend their last two full-time semesters (of at least 12 semester hours each) in residence at the College. A student may be permitted to study off campus during the Senior year if the previous full year has been spent in residence and if prior approval has been granted by the Academic Appeals Committee.

Pre-Professional Study

Bethany offers pre-professional study programs in:

- Engineering
- Medical and Health Professions
- Law
- Ministry

The Bethany engineering program permits students to earn both a bachelor's degree from Bethany and a B.S. in engineering from a cooperating engineering school upon completion of a five-year sequence. Students spend three years in the liberal arts environment of Bethany and then attend Case-Western Reserve University, Columbia University, Georgia Institute of Technology, or Washington University for an additional two years.

Students desiring to prepare for the study of medicine, dentistry, or any other health related field find instruction and facilities at Bethany which satisfy the entrance

requirements for the best professional schools. Medical admission tests must be taken in the junior year and specific course planning is required, beginning with the first semester of the freshman year. Bethany also provides a degree program for certified allied health professionals who have completed accredited technical programs at other institutions.

No single curricular pattern is recommended as preparation for law school, but Bethany provides the key ingredients for entrance, such as breadth of knowledge and high levels of achievement in writing, critical thinking, and logical reasoning.

Students planning to enter church vocations complete their preparation in seminaries and graduate schools of religion after undergraduate pre-seminary studies at Bethany.

Bethany also provides thorough preparation for professions in the fields of business administration, communications media, public administration, teaching at all levels, social work, and many more. Students are encouraged to contact individual academic departments, as well as the College's Office of Career and Professional Development, for academic and career planning.

Internships

Students may spend a semester combining practical professional experience with formal off-campus study. A student wishing to do this must obtain a full-time job in his or her chosen area and arrange independent study credit which will integrate this work experience with formal theoretical study.

A written proposal, signed by the faculty member charged with supervising and evaluating the project, must be approved by the Faculty Curriculum Committee. The proposal must provide a description of the student's goals in undertaking the program, a description of the experience including a summary of his or her responsibilities and the name of his or her supervisor, a description of the formal independent study course work, an explanation of the way in which the program will integrate the work experience and the formal independent study course work, and a description of the methods to be used in supervising and evaluating the entire project.

Students may earn eight credit hours upon satisfactory completion of the project. No additional academic work may be taken during the semester of the project.

Study Abroad

Qualified students may earn academic credit for formal study completed in foreign countries. To be eligible for study abroad, a student should normally have junior standing. Approval by the faculty International Education Committee is required.

Several programs for study abroad are part of the Bethany curriculum:

Heidelberg Program

Qualified students work out individualized programs of intensive study in the German language at the university level in Heidelberg, Germany.

Oxford Semester

Approximately twenty students spend the fall semester in Oxford, England with a Bethany professor studying British literature, history, and culture. Participants are full-time matriculated Bethany students, but live and study in Britain.

Paris Sorbonne Program

By special arrangement with the Sorbonne, qualified Bethany students may enroll for a semester or a full year in its Cours de Langue et de Civilisation Française. A Bethany representative in Paris serves as counselor to Bethany's students during their stay at the Sorbonne.

Spain Study Program

Through special arrangement with universities in Pamplona and Salamanca, qualified Bethany students may enroll for a semester or full year.

Other Programs

Bethany students have participated in additional programs for study abroad. The Director of International Education Programs can provide interested students with information about programs which have been examined and approved.

Washington Semester

One or two advanced students in history, political science, economics, or sociology may pursue studies in these fields under the direction of the American University in Washington, D.C. A student participating in this plan takes six to nine hours in regular academic work and six to nine hours in the study of government supervised by Bethany College and American University. Participants in the program must be recommended by the program advisor and have the approval of the Dean of the Faculty.

State Government Study

The Departments of History and Political Science administer a program in conjunction with the West Virginia University Foundation in which an outstanding junior or senior is selected each year to spend one week in Charleston, W. Va., studying the three branches of state government. Students may earn two hours of credit for this program.

Academic Common Market

Bethany is a member of the Academic Common Market, an interstate agreement among southern states for sharing academic programs. This agreement allows Bethany students, who qualify for admission, to apply for enrollment in 80 graduate degree programs in other common market states on an in-state tuition basis. The Southern Regional Education Board sponsors this program. Further information concerning the Academic Common Market is available at the Office of Career and Professional Development.

External Programs

Bethany College develops special programs for older adults through intensive, short-term residential and off-campus seminars, institutes, courses, and workshops. These programs generally serve business, industrial, educational, professional, and church organizations.

Each summer, the Bethany campus and facilities are used for camps for youth, including camps for sporting activities, church groups, and musical groups. Retreats and workshops also are conducted on the Bethany campus.

Facilities and Resources

Substantial resources are invested in the education of Bethany students. The gross assets of the College on June 30, 1989, totaled \$50,033,918. Facilities and equipment at book value were \$26,007,948 with a replacement value of approximately \$40,609,700. The market value of all endowment funds was \$24,315,906.

The Academic Computer Center

The Academic Computer Center houses state-of-the-art computing facilities, including an Artificial Intelligence Laboratory. The facility is available to all students for work on class assignments and projects.

Library and Media Center

The library serves the Bethany community in the following ways:

- By acquiring and making available traditional and non-traditional forms of information and knowledge
- By providing support, guidance, and training in the selection and use of information sources
- By helping students learn to evaluate information
- By helping faculty and students realize the goals of specific courses
- By promoting awareness of issues concerning the accessibility to and distribution of information
- By keeping the community abreast of developments in information technology and resources
- By collecting, preserving, and providing access to archival materials documenting the history of the College and Alexander Campbell, its founder

The primary center for library services and resources is the T.W. Phillips Memorial Library, which houses the Media Center and the Center for Campbell Studies. In addition to the collections housed in the main library building, the library assists in maintaining specialized library-reading rooms at various locations on campus for chemistry, economics, education, and law. The main library is open ninety hours per week when classes are in session, providing library and media services throughout the campus and access to collections and databases worldwide through interlibrary loan and computer networks.

Recreation Facilities

The Larry Hummel Fieldhouse (formerly Alumni Fieldhouse), John J. Knight Natatorium, and various playing fields are available for student use at most hours. A major expansion of these facilities is planned.

Special Advising Center

The Special Advising Center provides counseling to students with diagnosed learning disabilities and guides them in developing successful strategies for learning.

Career and Professional Development

Bethany's Office of Career and Professional Development assists students and alumni in planning careers and obtaining both temporary and permanent jobs. Career counseling is provided and workshops are presented on such topics as resume writing, interviewing, job hunting, and skills identification. The Office coordinates and schedules on-campus recruiting. It also maintains a Career Resource Center consisting of career planning literature, job announcements, a volunteer contact network of alumni and friends of the College, material on internships, and graduate and professional school information. Free credential service is available to all seniors and alumni who register with the Office.

The Leadership Center

Millsop Building houses offices, seminar rooms, exhibition areas, and a 123-seat circular conference room for continuing education activities. The center offers a regular series of conferences, seminars, and workshops for education, business, and professional groups. It is a memorial to Thomas E. Millsop, former president and chairman of the National Steel Corporation.

Gresham House (1972) is a guest facility which provides 40 rooms for overnight accommodations for visitors to the College. It is named for Dr. Perry E. Gresham, Bethany's twelfth president, and his wife, Aleece.

Harder Hall (1981) is an educational laboratory and dining facility. It adjoins Gresham House, the guest facility. It honors Delmar C. Harder, a pioneer in automation in the American auto industry.

College Buildings and Grounds

More than 30 academic, administrative, and residential buildings are located on the 1,600 acre campus. The principal structures are:

Old Main (1858) is the centerpiece of Bethany's academic buildings. Its tower dominates the campus and is the chief architectural feature noted as one approaches the College. Old Main is listed in the *National Register of Historic Places*. The building is one of the earliest examples of collegiate Gothic architecture in the United States. Old Main restoration work has been under way since 1977 with approximately \$3.5 million invested in the project.

Commencement Hall (1872) provides the setting for convocations, concerts, lectures, dramatic presentations, and other gatherings. During 1983-1984, the Hall was restored to its original state.

Grace Phillips Johnson Visual Arts Center (1984) offers facilities for computer graphics, television, painting, sculpture, and design. The Sandra Weiss Berkman Studio for Ceramic Arts is adjacent to the Center. The building was formerly Irvin Gymnasium (1919). Complete renovation accomplished during 1983-1984 makes this an outstanding facility for instruction in the visual arts.

Richardson Hall of Science (1964) provides contemporary facilities for the chemistry, physics, and mathematics departments and houses the Academic Computer Center. It is named for Robert Richardson, Bethany's first science professor.

David and Irene Steinman Fine Arts Center (1969) provides excellent facilities for music and theatre. A fully equipped theatre occupies the central portion of the building. Teaching studios, studio-classrooms, a general rehearsal room for the larger vocal and instrumental groups, and individual practice rooms support instruction in music.

Cramblet Hall (1905) was constructed through a gift from Andrew Carnegie. Originally the library, it was remodeled in 1961 to house administrative offices. It is named in honor of two presidents of the College, Thomas E. Cramblet and his son, Wilbur Haverfield Cramblet.

Cochran Hall (1910) was built as a men's residence by Mark M. Cochran of the class of 1875. The interior of the building was completely remodeled during 1974-1975 to serve as a site for faculty offices and student conferences.

Oglebay Hall (1912) accommodates the laboratories and classrooms for the biology and psychology departments. The building was a gift of Earl W. Oglebay of the class of 1869.

Pendleton Heights (1841) was built during the College's first year by W. K. Pendleton, a member of the first faculty and second president of the College. Today it serves as home for Bethany's president. Pendleton Heights is listed in the *National Register of Historic Places*.

Renner Union-Bethany House (1948) is the student union. Here are found the campus radio station, the College bookstore, a student photographic darkroom, music listening rooms, a spacious lounge, and the Admission Office. The alumni joined in 1969 with the R. R. Renner family of Cleveland, Ohio, to remodel this facility.

Benedum Commons (1969) is the modern, air-conditioned dining facility for all Bethany students. In addition to the main dining room, "The Ogden Room," the building houses a snack bar, lounge facilities, and several small dining rooms, including "The Berkman Room," for special student and faculty events.

John J. Knight Natatorium (1967) contains a six-lane, 25-yard, heated pool which is used in the physical education program and for intercollegiate competition. It is named for John J. Knight, long-time director of athletics. Four tennis courts are located next to the natatorium.

Larry Hummel Fieldhouse (1990) provides physical education facilities for men and women. It is also used for concerts. Formerly Alumni Fieldhouse (1948), the building was extensively renovated in 1989-90. Adjacent to the fieldhouse are football, soccer, and baseball fields, tennis courts, and a quarter-mile track.

The T. W. Phillips Memorial Library (1959) serves as the hub for an academic information network that provides the campus with over 250,000 items locally (books, periodicals, newspapers, microforms, pamphlets, audiovisuals, archival materials) and access to millions of titles across the nation and around the world through OCLC, Dialog, and other computer networks. The Center for Campbell Studies, housed in the Library contains books periodicals, letters, paintings, photographs, and museum pieces related to Bethany's founder and first President, Alexander Campbell. The Media Center, also located in the Library, provides instructional media equipment, materials, laboratories, and production facilities.

Student Life

Education at Bethany is an experience in integrated living and learning. The College community offers a great variety of activities, and students are encouraged to participate in those which best complement their educational experience. Many opportunities for leadership experience are provided.

Bethany encourages mature and responsible citizenship by its students. The College believes this citizenship is realized through the measured personal freedom of each individual, and the community-building efforts of students, faculty and administrators. College officials intervene when the rights and privileges of some are threatened by the actions of others.

During the 1985-1986 academic year, students, faculty and trustees cooperated in writing a Compact for Bethany College. The Compact is a general statement of philosophy, aspiration, and expectation regarding the way the entire Bethany community is to live together. All members of the College are urged to read and live up to the ideals of this statement. It can be found in the Bethany College Student Handbook.

Student Government

The Student Board of Governors, composed of representatives from all residence groups, manages a substantial budget and appropriates funds for a wide variety of student activities. Students are appointed to many faculty committees, including those concerned with curricula, athletics, international education, cultural and speakers' programs, and others.

Residence halls help to shape the social life of the campus. Fraternities, sororities, and house associations accommodate all upperclassmen in small, self-governed units. Students are responsible for their conduct in the residence halls, for academic, cultural, and social programming sponsored by the halls, and for care of the facilities. Freshmen, soon after their arrival, organize and send representatives to student government.

Residence Life

Most Bethany residences are small housing units accommodating 32 or 48 students and containing social and recreational facilities.

Freshmen live in somewhat larger residence halls, but are granted many of the same freedoms and responsibilities of the upperclassmen. Head residents and student resident assistants provide leadership and counsel to freshmen.

Phillips Hall, one of two freshmen women residences, is the most gracious residence hall on campus. Built in 1890, it was remodeled and restored in the late 1970s. The ground floor now houses a large, multi-purpose recreation room, Renner Too, and Maxwell's Coffee House and kitchen facilities.

Social Life

Fraternities, sororities and independent house associations constitute the primary social groups of upperclass men and women on campus. The six fraternities and four sororities are nationally affiliated and their members constitute approximately 60 percent of the student body. Representatives from each serve on agencies which coordinate fraternal affairs and activities.

Fraternities represented are Alpha Sigma Phi, Beta Theta Pi, Delta Tau Delta, Kappa Alpha, Phi Kappa Tau and Sigma Nu. Sororities are Alpha Xi Delta, Kappa Delta, Phi Mu and Zeta Tau Alpha.

The student-run Renner Union Program Board is responsible for programming a wide range of activities on campus. These include cultural events, such as opera, dance, and art exhibits, as well as popular events, such as concerts, dances, and other social activities.

In the past few years Bethany programs centering on international business, American business, and American politics have brought an array of distinguished speakers and visitors to the campus to meet with students and faculty. These programs have featured a former President of the United States, United States Senators, Governors and former Governors, Ambassadors, corporate chief executive officers, and leaders in the fields of public affairs, business, sciences, and the arts.

Other activities on campus which are well supported by student participation include theatre, various musical groups, intercollegiate and intramural sports, and student-run clubs. The campus media (a weekly newspaper, a yearbook, a magazine, a literary magazine, an FM radio station, and a cable TV station) command much student interest and participation.

Religious Life

A wide variety religious backgrounds are represented in the student body and faculty. Although participation is voluntary, there are many opportunities for religious activity on campus.

Many students find Bethany Memorial Church an opportunity for expression of their religious faith. The minister of this church, who is also a College Chaplain, is available to students for counseling and advice on personal and religious matters.

The Bishop of the Wheeling-Charleston Diocese of the Roman Catholic Church provides a chaplain and chapel for Catholic students. The chaplain is available daily for counseling, in addition to the celebration of Mass each Sunday and on holy days.

The Jewish fellowship meets for worship and study. Jewish congregations in Steubenville and Wheeling sponsor the fellowship and entertain Jewish students for the high holidays.

Student Regulations

The *Student Handbook* contains a complete description of the regulations pertaining to housing, dining facilities, health services, motor vehicles, use of alcoholic beverages and drugs, eligibility requirements, and other areas of student life. However, applicants for admission should know the following in advance:

- 1) The College expects and enforces lawful behavior in all matters. Particular emphasis is placed upon respect for the rights of others and upon other principles of good citizenship.

- 2) With the exception of commuters (i.e. married students or students living with parents) all students are required to live in College residence halls or fraternity or sorority houses unless excused by the Vice President for Student Services.
- 3) All students, except commuters, are required to board in the College dining hall unless excused by the Vice President for Student Services. No refunds are granted for meals missed.
- 4) Freshmen are not permitted to bring automobiles to Bethany unless the request is approved by the Vice President for Student Services and the vehicle is properly registered.
- 5) Violations of regulations which are not adequately dealt with by the self-governing housing unit are judged or otherwise disposed of by the Vice President for Student Services.

Student Health Services

All students entering Bethany for the first time are required to submit a completed physical examination form before registration. The College health service is maintained by student fees, and all students are entitled to nursing service and specified access to a physician. A minimum charge for prescription medicines, ointments, or injections may be added to the student's account under certain conditions.

The Bethany infirmary is on 24-hour call for illnesses and injuries which occur during the academic year. Service is not available at the infirmary during vacations and recess periods. Students who suffer serious illness and accidents are usually treated at the Wheeling Hospital, located 15 miles from the town of Bethany. Ambulance service for emergencies is available.

The College physicians have regular office hours during the week for free consultation. In case of an emergency operation, when the parents cannot be reached, the Vice President for Student Services, upon the recommendation of the College physician, assumes the responsibility of giving permission for treatment.

Bethany provides medical, surgical, and hospitalization insurance. All students are automatically included in the coverage from September 1 to August 31 and are charged accordingly unless the appropriate waiver is forwarded to the Business Office.

Expenses for outside consultation and treatment are the responsibility of the student in all cases when not covered by insurance.

Bethany has had a substance abuse program on campus since 1981, which has been continually refined and improved in the light of national trends and current information. The program is under the leadership of the Head of the Social Work Department in association with the staff of the Office of Student Services, the Health Services Staff, the Counseling Staff, and off-campus Certified Alcohol and Substance Abuse Counselors. Through the program the College provides community-wide educational workshops, support groups, and intervention for those in jeopardy.

Intercollegiate Athletics, Intramurals, Recreation

Bethany College is a member of Division III of the National Collegiate Athletic Association. Varsity women's and men's teams participate in the Presidents' Athletic Conference. Members of the Conference, in addition to Bethany, are Grove City, Thiel, Washington & Jefferson, and Waynesburg. Men's teams compete in baseball, basketball, cross country, football, golf, soccer, swimming, and track. Women's teams compete in basketball, soccer, softball, and volleyball. Individual women may also participate in cross country, swimming, and track.

Club sports teams provide intercollegiate competition in men's baseball, ice hockey, lacrosse, soccer, and volleyball. Women's teams on the club level participate in lacrosse and softball.

A wide variety of sports is offered to the entire student body through Bethany's intramural program. Facilities are located on or nearby the campus for numerous individual or group athletic, health, and recreation activities.

Scholarships, Recognition Awards

Bethany recognizes promise and intellectual attainment by awarding a large number of scholarships. These awards vary in value and are available to a limited number of entering students. Most scholarships are awarded to freshmen on a four-year basis, but are continued from year to year only if the recipient has met the following conditions:

- A satisfactory scholarship index
- Satisfactory conduct as a student
- Worthwhile contributions to the College program
- Constructive citizenship in the College community
- Payment of student accounts as scheduled

Each fall Bethany holds the **Competitive Scholarship Opportunity**, a program which offers tuition grants, regardless of financial need, in areas of social sciences, physical and life sciences, and the humanities. These scholarships are awarded on the basis of performance on a competitive examination, secondary school record, standardized test scores, and personal qualities.

Each spring Bethany offers its **Kalon Leaders Program** in which participants vie for four-year tuition grants, also regardless of financial need. Selection is based upon past leadership achievements, secondary school record, a required essay, references, and interviews by Bethany faculty.

Bethany offers a wide range of scholarships, designated and external trust scholarships, as well as sustained awards and loan funds.

These awards, most named for distinguished alumni and faculty members and friends of the College, are awarded to worthy and eligible students. Some are designated for specific fields and interests.

Awards are made by the President and by the Scholarship Committee in accordance with the requirements of a particular endowed fund.

A complete listing of all scholarships is available from Bethany's Office of Development, the Office of the Dean of the Faculty, and the Office of Student Services.

Achievement Recognition

Bethany encourages achievement in scholarship and leadership in student affairs by public recognition at Commencement, Honors Day, and on other suitable occasions.

Graduation Honors

Students who have done academic work of unusual merit are graduated with honors: *Summa Cum Laude* (3.85); *Magna Cum Laude* (3.65); *Cum laude* (3.35). The awarding of honors is determined upon the basis of total quality points earned, performance on the Senior Comprehensive Examination, and the recommendation of the student's advisor.

Senior Fellowships

Certain members of the junior class may be designated as senior fellows for the following year. The selection is made from students who have demonstrated unusual excellence in their major and the character and ability to do special work ordinarily as an assistant in instruction or research.

No more than twelve full-year senior fellowships and one senior fellowship at-large or the equivalents are awarded in any one year. Usually no more than one full-year fellowship or the equivalent is awarded in any one department. Although the title of senior-fellow-at-large is primarily for capable students in interdisciplinary programs, students in other majors may be nominated for this category.

The selection of senior fellows is made by the Honors Committee, usually from nominations presented by department heads.

Dean's List

At the end of each semester students who have demonstrated a high level of academic achievement (grade point average of 3.65 or better) and have completed at least 12

Honor Societies

A number of honor societies have been established at Bethany through the years to recognize academic achievement and campus leadership.

College-Wide

Gamma Sigma Kappa is a scholastic society founded at Bethany in 1932. Degree-seeking students who have achieved a cumulative scholarship index of at least 3.70 (over at least four consecutive semesters and provided that in no semester their scholastic index falls below a 3.00 and provided the student has completed at least 12 graded hours in each of the semesters) may, upon recommendation of the Honors Committee, be considered for membership. Usually, however, not more than 10 percent of any class will be recommended.

Bethany Kalon is a junior and senior society established in 1948 to give recognition to students of high character who have demonstrated competent and unselfish

leadership in student activities and have been constructive citizens of the College community. Selection is made by members of the society with the advice and approval of the Honors Committee.

Biology

Alpha Phi Chapter of Beta Beta Beta is for students of the biological sciences. Its purpose is to stimulate sound scholarship, to promote the dissemination of scientific truth, and to encourage investigation into the life sciences.

Chemistry

Pi Alpha Chapter of Gamma Sigma Epsilon, a national chemistry honorary, was established at Bethany in 1989. Its purpose is to promote and recognize interest, scholarship, and research in the field of chemistry. Students are elected from those who have completed a minimum of 16 semester hours of chemistry with at least a 3.00 grade-point average and an overall grade-point average of 2.75, or from students recommended by faculty in the Chemistry Department.

Communications

The Bethany Chapter of the Society for Collegiate Journalists, a national recognition society in journalism, is designed to stimulate interest in journalism, foster the mutual welfare of student publications, and reward journalists for their efforts, service, and accomplishments.

Economics

Alpha Chapter of Omicron Delta Epsilon, an international honor society in economics, was established in 1960 to recognize excellence in the study of economics. Membership is limited to students who have completed a minimum of 12 semester hours of economics, including either Economics 301 or 302, and who have achieved both a departmental and overall grade-point average of 3.25 or better.

Education

Alpha Beta Gamma is an honorary organization in education dedicated to recognizing and fostering professional concern, involvement, and experience in education.

Fine and Applied Arts

Beta Gamma Chapter of Alpha Psi Omega is a national recognition society in dramatics. Students qualify by faithful work in playing major and minor roles or working with technical or business aspects of theatre.

Epsilon Chi Chapter of Kappa Pi is for students of graphic arts. Its purpose is to uphold the highest ideals of a liberal education, to provide a means whereby students with artistic commitment meet for the purpose of informal study and entertainment, to raise the standards of productive artistic work, and to furnish the highest reward for conscientious effort in furthering the best interest in art in the broadest sense of the term.

Sigma Tau Epsilon music honorary promotes participation and appreciation of music by encouraging attendance at recitals, sponsoring field trips to concerts, and providing an opportunity for students of music to meet and exchange ideas. The honorary also encourages participation in College musical groups and solo recitals while upholding high standards of musical performance. Qualifications for membership include active participation in College musical organizations.

Foreign Languages

Kappa Xi Chapter of Sigma Delta Pi is an honor society for those who attain excellence in the study of the Spanish language and the literature and culture of the Spanish peoples. Students who are at least second semester sophomores and have a high scholastic index and who have completed at least one advanced course in Spanish literature are eligible for membership.

History

Mu Epsilon Chapter of Phi Alpha Theta was established at Bethany in 1967 to recognize excellence in the study of history. Its membership is limited to those students who have completed at least 12 hours of history with a grade-point average of 3.1 or better and with at least a 3.0 grade-point average in two-thirds of all other studies. Members also must rank in the upper 35 percent of their class.

Literature

Gamma Upsilon Chapter of Lambda Iota Tau is an international honor society for the encouragement and reward of scholastic excellence in the study of literature. Membership is limited to juniors and seniors who have a cumulative scholarship index of 3.0, who have completed a minimum of 12 semester hours of literature courses with at least a 3.0 grade-point average in them and in all prerequisite courses, and who have presented a scholarly, critical, or creative paper which has been accepted by the chapter. The chapter presents an annual award for the best senior project in literature. Lambda Iota Tau is a member of the Association of College Honor Societies.

Mathematics

Alpha Chapter of Kappa Mu Epsilon, a national honor society in mathematics, was established in 1975 to recognize outstanding achievement in mathematics. Its membership is limited to those students who have completed at least three semesters at Bethany, rank in the upper 35 percent of their class, have completed at least three mathematics courses, including one semester of calculus, and have a grade-point average of 3.0 or better in all mathematics courses.

Physical Education

Phi Delta Psi is a physical education honorary for both men and women which encourages scholarship, leadership, fellowship, high educational standards, and participation in departmental activities. To be eligible, students must be at the second semester level of the sophomore year and achieve a grade-point average of at least 3.0 in Physical Education after taking at least nine hours in the department.

Social Science

Pi Gamma Mu is a social science honorary for men and women who have achieved high academic standing in the study of history, economics, political science, sociology, and geography. A 3.0 average in at least 20 hours of study in these fields and standing in the top 35 percent of their class are required for membership.

Awards

College-Wide

Oreon E. Scott Award is presented to the graduating senior who has achieved the highest academic standing over a four-year period of study. The donor of this award was a long-time Bethany trustee and a graduate of the class of 1892.

Francis O. Carfer Prize is given to the senior who, in the judgment of the Honors Committee, has made the most outstanding contribution to the College. Mr. Carfer, a trustee of Bethany College for 29 years, was a graduate of the class of 1909. Recipients of the award must display sound academic accomplishments and characteristics of loyalty, service, and devotion to Bethany.

Aleece C. Gresham Award, announced each spring at the May Morning Breakfast honoring senior women, was initiated in 1987 and is presented to a senior woman who has attended Bethany for at least five semesters. To be eligible for selection, senior women must have a grade-point average of at least 2.5 or better, have participated in and displayed leadership in a variety of co-curricular activities, and must have shown dedication and commitment to Bethany College.

The Pittsburgh Bethany College Club, comprising the Bethany alumnae of Pittsburgh, provides an award to the outstanding woman in the junior class. The award is based on qualities of leadership, character, conduct, and scholarship. The Club has placed a plaque in Phillips Hall on which names of winners are engraved. In addition, an individual gift is made to the recipient.

W. F. Kennedy Prize is given to the outstanding man in the junior class. This prize, established by Mr. Kennedy of Wheeling, W.Va., is awarded on the basis of the student's contribution to the College community life through leadership in activities, in personal character, and scholarship.

Richard B. Kenney Freshman Leadership Award is granted to a freshman who has demonstrated outstanding scholarship, leadership, and character at Bethany, who has become actively involved in Bethany, and who has contributed service and devotion to the College community. The student must achieve at least a 3.50 grade-point average during the first fall semester at Bethany. The award honors the late Dr. Kenney, T.W. Phillips Professor of Old Testament Literature who taught at Bethany from 1964-1986. The award was established by the Freshman Activities Council of 1986-1987.

Lambda Iota Tau Freshman Writing Award, awarded by the English Department and Lambda Iota Tau, is given annually to the author of the best essay written in the freshman interdisciplinary course. Each discussion group leader submits the best essays from the group, and the winning essay is determined by a panel of judges.

Research Awards

Gans Fund Awards are presented to juniors, seniors and graduates of the College who are engaged in approved study and research in some specific field of the sciences at Bethany College or elsewhere. The direct charge is "for the encouragement of research and discovery in the various fields of science." These awards were established by Wickliffe Campbell Gans of the class of 1870 and Emmet W. Gans in memory of their father and mother, Daniel L. and Margaret Gordon Gans.

Social Groups

Anna Ruth Bourne Award stimulates scholarship among the women's social groups. A silver cup, provided by an anonymous donor in honor of the former distinguished head of the English Department, is awarded to the recognized women's group whose active membership earns the highest scholarship standing each semester. The group winning the cup for four semesters is presented with a smaller replica as a permanent trophy.

W. Kirk Woolery Award encourages scholarship among the men's social groups. A silver cup, donated by friends of the late Dr. Woolery, a former Dean and Provost of the College, is held by the recognized men's social group or housing organization whose membership (active membership only in the case of fraternities) earns the highest scholarship standing each semester. Any group winning the cup for four semesters is presented with a smaller replica as a permanent trophy.

Travel Awards

Bettie Blanck Travel Award is made to the student whose proposal for foreign travel best promises to augment study in English literature. The award was established by Thomas A. Hopper, class of 1967, in honor of his mother, a member of the class of 1944.

Vira I. Heinz Award is granted to the junior woman who has distinguished herself by leadership, character, and scholarship and whose proposal for foreign travel most significantly supplements her educational objectives. This award for summer travel is provided by the fund of the late Vira I. Heinz, recipient of the honorary Doctor of Religious Education degree from Bethany in 1969.

Benjamin Chandler Shaw Travel Award is granted to the junior man who has distinguished himself by leadership, character, conduct, and scholarship and whose proposal for foreign travel most significantly supplements his educational objectives. The award is funded by an anonymous friend of the College in recognition of the late Dr. Shaw, Bethany's George T. Oliver Distinguished Professor of History and Political Science. Dr. Shaw joined the Bethany faculty in 1935, served from 1945 to 1966 as head of the Department of History and Political Science, and continued part-time as a faculty member until 1975.

Library

Edna W. Woolery Bibliography Prize, named for the Librarian at Bethany College during the 1950's, is awarded to a senior student and to a freshman student who have individually compiled a bibliography and who request that it be considered for receiving the award. In the event that the award, established in 1981, is not granted in any year, the funds are used to purchase books for the Library. Additional information is available from the Librarian.

Biology

Beta Beta Beta - B. R. Weimer Award, established in honor of the late Dr. Weimer, Professor of Biology and Dean of the Faculty, is given each year to the senior in Biology who has attained the highest academic rank in this major.

Beta Beta Beta Prize is awarded the student who has received the highest grades in the initial courses in biology.

Chemistry

Senior Chemistry Award is granted to the senior concentrating in chemistry who has achieved the highest cumulative average in the department.

Freshman Chemistry Award is presented each year to the student who attains the highest grade-point average in a freshman-level chemistry course.

Communications

E. E. Roberts Distinguished Prize in Campus Journalism is awarded to an outstanding student who excels in work with one of the student media, in academic work in the Department of Communications, or both.

Society for Collegiate Journalists Award of Merit is presented to an upperclass writer or editor for significant contributions to campus student publications.

WVBC-FM Senior Award is given to the senior who for four years has lent qualities of dedication, loyalty, leadership, talent, and creativity to WVBC's operations.

WVBC-FM Talent Award is presented to the member of the WVBC staff who has offered the most outstanding continuous radio programming during the year.

Economics

Forrest H. Kirkpatrick Award is presented annually to the outstanding senior majoring in economics. The award is named in honor of Dr. Kirkpatrick, long-time professor and dean of the College.

Wall Street Journal Award is given to the student majoring in economics who has the highest average in selected departmental courses and who has shown strong participation in departmental activities.

English

Florence Hoagland Memorial Award, given by a graduate of the class of 1944, is presented to the outstanding senior English major. The award honors the memory of the late Miss Hoagland who was for many years Professor of English at Bethany.

Christine Burleson Memorial Award, given by a graduate of the class of 1936, is presented to a senior English major who has attained excellence in this field. The award honors the memory of the late Miss Burleson who was professor of English and Dean of Women from 1932 to 1936.

Cammie Pendleton Awards, named in honor of Miss A. Campbellina Pendleton, Professor of Language and Literature at Bethany from 1884 to 1909, are presented to the outstanding junior and sophomore majoring in English. These awards are given by Dwight B. MacCormack Jr. of the class of 1956, in memory of his grandmother, Dr. T. Marion MacCormack.

Fine and Applied Arts

Rush Carter Prize in music is presented to a member of the senior class in recognition of outstanding achievement in music. The prize honors the memory of the late Professor Carter who was a member of the Bethany faculty from 1934 to 1945.

George K. Hauptfuehrer Award in music is sponsored by Sigma Tau Epsilon in honor of Professor Hauptfuehrer, Professor of Music and Head of the Department of Music Emeritus. The award is presented to the Bethany student who has demonstrated musical excellence and has participated actively in campus musical organizations. Preference is given to seniors.

Charles H. Manion Award is made to the outstanding senior in Fine and Applied Arts with an emphasis in one of the art areas. The award memorializes Mr. Manion, long-time trustee of Bethany College who was associated with the steel industry in the Ohio Valley and who enjoyed painting. The award is provided by his daughter, Mrs. Leonard Yurko of Weirton, W.Va.

A. Kenneth Stevenson Theatre Award is presented each year to the outstanding Bethany junior or senior of any discipline with a minimum grade-point average of 3.2 who has contributed most significantly to Bethany College Theatre activity. The award also provides for guest artists to enhance the program in Theatre. Mr. Stevenson of Washington, Pa., was a long-time supporter of the Bethany College Theatre program until his death in 1979. Mrs. Stevenson, her sons, Drew and Mark, both graduates of Bethany, and members of the Department of Fine and Applied Arts make the yearly selections.

Foreign Languages

Pearl Mahaffey Prize is awarded to the outstanding senior major in Languages. The award was established by Mrs. Walter M. Haushalter and other former students of Bethany's Emeritus Professor of Foreign Languages. The prize honors Miss Mahaffey, a faculty member from 1908 to 1949 and a trustee of the College at the time of her death in 1971.

Theodore R. Kimpton Prize is awarded to the outstanding French student. This prize, which is restricted to those students whose native language is other than French, was established by Kimpton, Assistant Professor of Foreign Languages at Bethany prior to his retirement from full-time teaching in 1975.

Shirley Morris Memorial Award was established by Theta Chapter of Zeta Tau Alpha in memory of Miss Morris, a member and past president of the chapter. The award is given to an outstanding student in the field of modern languages. Selection is made by the Department of Foreign Languages.

Margaret R. Woods Prize, sponsored by the Kappa Xi Chapter of Sigma Delta Pi, is awarded to the outstanding Spanish major. The prize honors Miss Woods who was a faculty member from 1943 until her retirement in 1965. Selection is made by the Department of Foreign Languages.

History

Frank Alfred Chapman Memorial is a fund established by Dr. Stanton Crawford to provide for an annual award to the outstanding history student. Preference is given to students of American History and the Ohio Valley.

Interdisciplinary Studies

Frank Roy Gay Award, established in 1982, is given to the senior interdisciplinary major who maintains a grade-point average of 3.5 or above and displays outstanding leadership qualities in the Bethany community. The award is named for the former Professor of Classics at Bethany who taught English literature, religion, and philosophy.

Literature

Lambda Iota Tau Outstanding Senior Project Award is presented annually to the student submitting the best senior project in literature.

Mathematics

W. H. Cramblet Prize recognizes outstanding achievement in mathematics. It is named in honor of Mr. Cramblet, the eleventh President of Bethany College.

Philosophy

Winfred E. Garrison Prize is presented in recognition of outstanding achievement in one or more areas of philosophy. The award honors the memory of the late Dr. Garrison, a member of the class of 1892, whose humane concerns and scholarly achievements contributed significantly to the area of higher education, history, and philosophy.

Physical Education

John J. Knight Award is presented to the senior male Physical Education major displaying outstanding scholarship and athletic participation during his four years at Bethany. To be eligible for selection, the student must have an overall grade point average of at least 2.75 and a grade point average of at least 3.20 in Physical Education.

S. Elizabeth Reed Award is presented to the senior female Physical Education major displaying outstanding scholarship and athletic participation during her four years at Bethany. To be eligible for selection, the student must have an overall grade point average of at least 2.75 and a grade point average of at least 3.20 in Physical Education.

Physics

J. S. V. Allen Memorial is a fund established by the family and friends of Professor Allen to provide for an annual award to the outstanding physics student.

Psychology

Thomas R. Briggs Award is presented annually to the senior in psychology who has maintained the highest academic average in the department. The award is a memorial to the late Mr. Briggs, class of 1978, recipient of the Psychology Society Award in 1978.

Religious Studies

Osborne Booth Prize is given to the student who excels in the field of Religious Studies and in the overall academic program. The late Dr. Booth was T. W. Phillips Professor of Old Testament when he retired in 1964 after 35 years of teaching at Bethany.

Sociology

Auguste Comte Award is presented to the senior of the Sociology Department for outstanding scholarship and keen interest in the field. The award is named after the founding father of the discipline.

Academic Procedures

Course Load

A normal semester load is 16 hours. A student may elect activities courses such as music, chorus, band, physical education, up to two hours with no additional fee, making the maximum academic course load 16 hours plus two hours of activities courses. Permission to take additional courses must be obtained from the Dean of the Faculty. Fees will be charged for any such approved courses. Applications for excess hours are available in the Registrar's Office.

A full-time student is defined as any student carrying at least 12 hours per semester.

Course Offerings

Most courses listed in departments are offered annually. Many, however, are offered every other year and a few are offered in three-year cycles. Students should see respective department heads for long-range course planning.

Activity Courses

Some courses which emphasize practice and performance are listed as activity courses. Of the 128 semester hours of credit required for a Bethany College degree, no more than 8 credit hours may be earned in activity courses and no more than 4 of these 8 credit hours may be earned in activity courses offered by a single department. A student may enroll in additional activity courses which will be listed on official transcripts and become part of the student's cumulative record.

Independent Study

Each department offers independent study for those students who have demonstrated the ability to work individually in some area of special interest. The student selects an area of study, subject to the approval of the head of the department. Upon approval, the student then completes an Application for Independent Study in the Registrar's Office before the start of the semester.

Cross-Listed Courses

When a course which is part of a department's requirements for its major may be taken for credit in more than one department, a student majoring in that field may register for the course in any department in which it is listed, but the course will count as part of the maximum credit which may be earned by the student within the major department.

Special Examinations

A student justifiably absent from a final examination or a test given in connection with regular class work is permitted to take a special test without payment of fees with the consent of the instructor and approval of the Dean of the Faculty. For any other examination a fee must be paid at the Business Office before the examination is taken, and the proper receipt must be presented to the instructor at the time of the examination.

Change of Schedule

During the first five class days of each semester, a student, with the approval of the advisor, may drop or add any course. No classes may be added after this time. A student may not withdraw from a full-semester course after the end of the ninth week of the semester or from a half-semester course after the end of the fifth week of the half-semester.

Class Attendance Policy

Students are expected to attend all class meetings and appropriate laboratory, discussion, and drill sections of their courses and to participate in all outside activities which are part of the courses.

Students may be granted official excused absences when they miss class for either of two reasons: (1) illness (as verified in writing by the Infirmary or another licensed provider of medical care); (2) participation in official college functions (as verified in writing by the Vice President for Student Services). It is the responsibility of the faculty to determine the nature of all other absences and to set proper responses to them, including possible academic penalties.

Grading System

Letter grades given and their equivalents in quality points are:

A.....	4.0	B—.....	2.75	D+.....	1.25
A—.....	3.75	C+.....	2.25	D.....	1.00
B+.....	3.25	C.....	2.00	D—.....	0.75
B.....	3.00	C—.....	1.75	F.....	0.00

Students are required to take at least 100 hours of letter-graded work.

Grades mean: A, *Superior*; B, *Excellent*; C, *Average*; D, *Below Average*; F, *Failure*.

*Other report abbreviations and their meanings are:

Cr. *Credit*. No quality points.

NCr. *No-Credit*. No quality points or academic penalty.

NG. *No grade*. Used at mid-term only.

Inc. *Incomplete*. No quality points. Incomplete work is a result of sickness or some other justifiable reason. An incomplete must be removed by the end of the fourth week of the following semester, unless an extension of time is granted by the Dean of the Faculty. It is not possible for a student to remove an incomplete after 12 months.

W. *Withdrawn.* Indicates withdrawal from a full-semester course before the end of the ninth week of the semester, or withdrawal from a half-semester course before the end of the fifth week of the course. Carries no quality points or credit hours.

Any student who carries 12 hours of letter-graded academic work may elect to take additional work on a Credit-No Credit basis in courses which are not used for the major, a minor, or the Perspectives Program.

A report of the scholastic standing of students is received at the Registrar's Office at mid-semester in addition to the final semester reports. These reports are sent to the faculty advisor and the parents or guardians of each student.

Classification of Students

For sophomore rank a student must have at least 25 hours of academic credit. Admission to full junior standing is conditioned upon the student having at least 60 hours of academic credit. For senior class rank the student must have at least 94 hours of academic credit.

Students are not considered candidates for the baccalaureate degree until they have been granted senior classification, have filed an application to take the Senior Comprehensive Examination in their major and have filed an application for a degree.

Probation

A satisfactory scholastic record at Bethany requires a student to have a semester's grade point average of at least 1.70 during the freshman year, 1.80 during the sophomore year, and 2.00 during the junior and senior years. Students who have failed to meet the academic standards expected by the College are placed on probation.

Probation is a warning to a student (and to the student's parents or guardians) that academic performance is unsatisfactory and that unless significant improvement is made, continuation at Bethany will not be permitted. At the end of a semester on probation a student's entire academic record is reviewed by the Academic Appeals Committee. Continued enrollment depends on the trend in academic performance. A student who is unlikely to meet the requirements for graduation in the usual four-year period may be dismissed. An extension of the four-year period is permitted only when there are extenuating circumstances.

Transcript of Records

Students wishing transcripts of records in order to transfer to other schools or for other purposes should make application to the Registrar's Office at least one week before the transcript is needed. Transcripts are issued only at the request of the student, and official transcripts are sent directly to the recipient specified by the student. One transcript is furnished to each student without charge; for each additional transcript a fee of \$1.00 is charged. When three or more transcripts are ordered at the same time, the first transcript is \$1.00, and the others cost \$.50 each. Fees must accompany the request. All financial obligations to the College must be paid before a transcript is issued.

Withdrawal

An honorable dismissal is granted to students in good standing who may desire to withdraw from the College if they have satisfied their advisor and a responsible officer of the College that there is a good reason to justify such action. Students asking to withdraw should present a written request to the Vice President for Student Services

along with a statement of approval from parent or guardian. The recommendation of the Vice President for Student Services is next presented to the Business Manager and then to the Registrar for final record. No withdrawal is considered complete until this procedure has been carried out.

Invalidation of Credits

Courses completed at Bethany or elsewhere more than 10 calendar years before the date of proposed graduation are not accepted for credit toward graduation. All candidates are expected to comply with degree requirements in effect at the time of acceptance of the degree application. With the approval of the Academic Appeals Committee and the payment of the required fee, the candidate may take examinations, as administered by the various departments, for courses included in the current curriculum, to reinstate academic credit that may have been declared invalid because of date.

Academic Appeals Committee

The Academic Appeals Committee is composed of members of the Bethany faculty charged with the responsibility of developing policies and procedures for the equitable and efficient administration of the academic machinery in such areas as attendance, the grading system, and academic standards. The Committee reviews students' academic records to apply College policies on such matters as academic standing, probation, eligibility, and dismissal. It evaluates and acts on student appeals for exemptions from established policies.

Changes in Regulations

Bethany reserves the right to amend the regulations covering the granting of degrees, the courses of study, and the conduct of students. Membership in Bethany College and the receiving of its degrees are privileges, not rights. The College reserves the right (and the student concedes to the College the right) to require the withdrawal of any student at any time.



Course Descriptions

Biology

Aims

To acquaint students with the living world around them and with basic life processes; to demonstrate the scientific method as an approach to problem solving; to cultivate an appreciation of research; to develop laboratory skill in various types of work in biology; to prepare students as teachers of biology and for professional fields such as medicine, dentistry, veterinary medicine, and for graduate schools in various biological disciplines; and to help students find and appreciate their role in the natural environment.

Requirements for Major

Biology majors must complete the General Biology Track or the Biochemistry Track. A minimum of 48 semester hours in the department including the senior project is required. All biology majors must complete a minimum of 16 semester hours in chemistry, including two semesters of organic chemistry, and eight hours of physics. German or French is recommended for those students preparing for graduate school. A semester of calculus is also strongly recommended. Statistics is recommended for students preparing for graduate work in ecology, wildlife biology, genetics, and certain other fields. Students with a special interest in botany should elect Bio. 338 instead of four hours from Bio. 440 and Bio. 442, and take Bio. 102 and Bio. 228.

The General Biology Track

Biology majors in the general biology track must complete Bio. 100, 110, 180, 290, 308, 326, 378, and 477. They must also choose four semester hours from Bio. 343, 425, 467, and four semester hours from Bio. 440, 442, or 338.

The Biochemistry Track

Biology majors in the biochemistry track must complete Bio. 100, 110, 180, 290, 308, 314, 320, 343, 378, 467, and 477. They should also complete eight semester hours of calculus.

Requirements for Minors

Botany: Bio 100, 110, plus eight hours from Bio. 102, 228, 326, 338.

Environmental Biology: Bio. 100, 110, 228, 231, 326.

Zoology: Bio. 100, 180, either 167 or 308, and four hours from 440, 442, or 425.

Requirements for Teaching Certification

Only Biology majors who have completed the following courses will be recommended for state certification to teach biology in the secondary schools: Bio. 100, 110, 167 or 308, 180, 290, 326, 343, 480; Chem. 101, 102; G.S. 103 or Phys. 103 or 201; the courses in the professional education sequence described in the listing of the Education Department (the minor in Secondary Education). *The following courses are prerequisite to student teaching: Bio. 100, 110, 167 or 308, 180, 290, 480.*

Bio. 100 Modern Concepts in Life Science 4 hours

An introduction to modern concepts of cell biology, metabolism, photosynthesis, nutrition, reproduction, heredity, evolution, behavior, and ecology, emphasizing the process of acquiring biological knowledge. Consideration is given to social and ethical implications of biological issues.

Bio. 102 Horticultural Science 2 hours

An examination of the scientific concepts on which horticulture is based. Emphasis is placed on the study of the plant, the basis of all horticultural activities.

Bio. 105 First Aid as Related to the Principles of Biology 2 hours

A major emphasis is placed on the biological principles utilized in the standard first aid and personal safety course of the American Red Cross. Red Cross certificates may be earned by those passing the examination. Opportunity for instructor's certificates will be presented as an option at the end of the course. (May be taken for credit as Physical Education 226.)

Bio. 110 Plants, People, and Environment 4 hours

A study of plant life including the evolution of the various groups of plants, an introduction to the morphology and anatomy of vascular plants, plant genetics and the functional life processes of plants. Some of the economic and ecological problems such as world food supply and effects of pollution on plants will also be examined.

Bio. 167 Introduction to Mammalian Anatomy and Physiology 4 hours

A study of mammalian anatomy as exemplified in the cat. Discussion and study of the functioning of the tissues and organ systems of the human body; lab study of the anatomy of the cat; human physiology. (Not open to biology majors. May be taken for credit as Physical Education 167.) *Prerequisite: Bio. 100.*

Bio. 180 Invertebrate Zoology 4 hours

A structural, functional, and evolutionary study of the major invertebrate phyla.

Bio. 205 Emergency Medical Training 4 hours

The medical, communication, transportation records, and report instructions required for certification by the West Virginia Department of Health as an emergency medical technician. (Red Cross advanced first aid certificate may be earned by those passing the examination.)

Bio. 210 Evolution 2 hours

An examination of the evidence for the theories of evolution with special attention to the modern synthesis of genetic and ecological factors. *Prerequisite: An elementary course in biology or permission of the instructor.*

Bio. 228 Field Botany 2 hours

An introduction to the taxonomy of vascular plants with emphasis on the local flora, including the techniques of herbarium science.

Bio. 231 Ornithology 2 hours

The anatomy, behavior, and identification of birds.

Bio. 250 Biological Rhythms 2 hours

Circadian and other rhythms are studied in living organisms including humans. An emphasis is placed on the physiological and behavioral aspects of rhythms.

Bio. 251 Endocrinology 2 hours

A study of various endocrine glands and their hormonal regulation of diverse physiological functions in health and disease.

- Bio. 290 General Genetics** **4 hours**
A synthesis of basic principles and modern molecular theory.
- Bio. 308 Comparative Vertebrate Anatomy** **4 hours**
Comparative anatomy of the representative forms of vertebrates: lab study of the comparative anatomy of the shark, other lower vertebrates, and the cat.
- Bio. 314 Introduction to Biochemistry** **4 hours**
The chemistry of fundamental biological reactions with an emphasis on structure-function relationships, metabolic pathways, and the regulation of biochemical processes. The laboratory provides an introduction to the modern experimental techniques of biochemistry. *Prerequisite: Chem. 212.* (May be taken for credit as Chem. 314.)
- Bio. 320 Physical Chemistry for the Life Sciences** **4 hours**
An introduction to the nature of thermodynamics including equilibrium processes. Applications of physical concepts to systems of biological interest are emphasized. A study of the rate processes in the liquid phase is included. (May be taken for credit as Chem. 320) *Prerequisite: Chem. 102.*
- Bio. 326 Ecology** **4 hours**
A study of the general principles of ecology of microorganisms, plants, and animals. Special emphasis is placed on field study of several communities.
- Bio. 338 Plant Anatomy and Physiology** **4 hours**
The morphology and anatomy of the vascular plants together with a study of the fundamental life processes of plants: growth, reproduction, irritability, metabolism, and hormonal control.
- Bio. 343 Microbiology** **4 hours**
The morphology and physiology of microorganisms; principles of lab technique; and cultural characteristics and environment influences on microbial growth.
- Bio. 378 Junior Seminar** **2 hours**
The theory and practice of selected methods in biological instrumentation and research. Special emphasis is placed on those methods not covered in other courses and on methods helpful for the completion of Senior Projects.
- Bio. 425 Animal Physiology** **4 hours**
A study of the structure and functions of the human body: the mechanism of bodily movements, responses, reactions, and various physiological states.
- Bio. 440 Histology-Microtechniques** **4 hours**
A study of the structure of the cell, its modification into various tissues, and the practice of general histological techniques.
- Bio. 442 Embryology** **4 hours**
A study of the ontogenetic development of selected embryos. Major emphasis is on the vertebrates.
- Bio. 467 Cell Physiology** **4 hours**
An introduction to the structural organization of cells and the important aspects of cell physiology in the light of modern biochemistry and biophysics. *Prerequisites: Chem. 211-212 or permission of the instructor.*
- Bio. 477 Senior Seminar** **2 hours**
An introduction to the literature of the biological sciences, both research papers and review articles, and the basics of scientific writing. The emphasis is on skills useful to the student who is in the process of finishing the written portion of the senior project. When possible, the student will make an oral presentation of the senior project and complete a paper or review article for publication as part of the seminar.
- Bio. 480 Methods and Materials in Teaching Physical and Life Sciences** **4 hours**
A study of the aims and methods of teaching the life sciences in the secondary schools. Special attention is given to teaching general laboratory procedures and to techniques of teaching. *Prerequisite: 16 hours in biology or permission of the instructor.*
- Bio. 487-488 Independent Study** **2 or 4 hours**

Starts the first semester of the junior year and is to be completed in the spring semester of the senior year.

Chemistry

Aims

To contribute to the student's general knowledge and understanding of the nature of the physical world and his or her understanding of the place of chemistry in industrial and business life; to provide experience in the scientific method of reasoning; and to provide students concentrating in this field with a thorough and practical education in chemistry which may be useful in industrial, technical, and graduate work.

Requirements for Major

Every student majoring in Chemistry is required to complete the following core courses: Chem. 101, 102, 211, 212, 324, 325, 490; Phys. 201, 202; Math, 201, 202. In addition, every student must complete either the Professional Chemistry Track or the Biochemistry Track. The program of study is consistent with the most recent standards of the American Chemical Society.

Entering freshmen interested in chemistry should select Chemistry 101 and mathematics at the appropriate level. Programs for subsequent semesters must be decided in conference with the faculty advisors for chemistry. Students with Advanced Placement (AP) in chemistry from high school should consult immediately with a faculty member in Chemistry for placement in a course at the appropriate level.

The Professional Chemistry Track

Chemistry majors in the Professional Chemistry Track must complete Chem. 320 or 322, 326, 404, four hours of electives in Chemistry; two hours selected from the following: C.S. 140, 142; Phys. 221, 222, 300; Math. 203, 341. Additional advanced courses in Mathematics are recommended.

The Biochemistry Track

Chemistry majors in the Biochemistry Track must complete Chem. 314, 320 or 322, 467; Bio. 290, 343. At least eight hours from the following courses are recommended: Bio. 100, 308, 338, 440, 442; C. S. 140 or 142; Math. 281.

Students who plan to do graduate work in chemistry should develop a reading knowledge of chemical German, French, or Russian. Additional courses in mathematics are also strongly recommended. All courses in chemistry as well as the indicated courses in mathematics and physics must be taken for a letter grade.

Requirements for Minor

Chem. 101, 102, 211, 212, 320 or 322, 324. (*Math. 201 and 202 are prerequisites for Chem. 320 and 322.*)

Requirements for Teaching Certification

Only Chemistry majors who have completed the following courses will be recommended for state certification to teach Chemistry in secondary school: Chem. 101, 102, 211,

212, 226, 314, 326, 404, 414; Phys. 201, 202; G.S. 480; the courses in the professional education sequence described in the listing of the Education Department (the minor in Secondary Education). *G.S. 480 is prerequisite to student teaching.*

Chem. 100 Consumer Chemistry **4 hours**

A course emphasizing an understanding of chemical concepts relevant to our everyday lives. Students completing the course should be able to analyze and discuss magazine and newspaper articles dealing with the subjects related to chemistry. *This course is designed for non-science students.* (May be taken for credit as G.S. 100.)

Chem. 101 General Chemistry I **4 hours**

A study of theoretical and descriptive inorganic chemistry. The laboratories provide students with experience in basic laboratory manipulations, problem solving, and testing of hypotheses. Three lectures and three hours of lab per week. *Prerequisites: Two units of high school algebra or concurrent enrollment in Math. 103.*

Chem. 102 General Chemistry II **4 hours**

A continuation of the lecture portion of Chem. 101. Study of solubility and acid-base phenomena in aqueous systems with appropriate lab work. *Prerequisite: Chem. 101.*

Chem. 211-212 Organic Chemistry **4 hours each**

An introduction to the study of the organic compounds of carbon, both aliphatic and aromatic, involving a considerable amount of the electronic mechanisms of organic reactions. Lab work consists largely of organic preparations. (Three lectures and three hours of lab per week.) *Prerequisites: Chem. 101, 102.*

Chem. 311 Bonding and Symmetry in Organic Chemistry **2 hours**

An introduction to group theory and simple molecular orbital calculations as they apply to organic chemistry and to the spectra of organic compounds. Emphasis is placed on problem solving and structural determinations from spectroscopic data. *Prerequisite: Chem. 322 or permission of the instructor.*

Chem. 314 Biochemistry **4 hours**

The chemistry of fundamental biological reactions with an emphasis on structure-function relationships, metabolic pathways, and the regulation of biochemical processes. The laboratory provides an introduction to the modern experimental techniques of biochemistry. *Prerequisite: Chem. 212.* (May be taken for credit as Bio. 314.)

Chem. 320 Physical Chemistry for the Life Sciences **4 hours**

An introduction to the nature of thermodynamics including equilibrium processes. Applications of physical concepts to systems of biological interest are emphasized. A study of the rate processes in the liquid phase is included. (May be taken for credit as Bio. 320.) *Prerequisite: Chem. 102 and Math 202 or permission of the instructor.*

Chem. 322 Physical Chemistry I **4 hours**

An introduction to the concepts of classical thermodynamics with special emphasis on the concepts of enthalpy, entropy, and free energy. A study in chemical kinetics, especially in the liquid phase. *Prerequisite: Chem. 102, Math. 202.*

Chem. 324 Analytical Chemistry **4 hours**

The study of principles of acid-base, oxidation-reduction, and solubility phenomena associated with solutions. Classical and modern applications of these principles to the analysis of unknowns will be performed in the laboratory. *Prerequisite: Chem. 102.*

Chem. 325 Chemical Instrumentation **2 hours**

The theory and practice of selected methods in chemical instrumentation. Special emphasis will be placed on those methods not covered in other courses and on methods helpful for completion of Senior Projects.

Chem. 326 Physical Chemistry II **4 hours**

A study in the different energy states of atoms and molecules, statistical principles governing the distribution of particles within these states, and the transitions between states. Introduction to transport processes, and surface and interface problems. *Prerequisite: Chem. 102, Math. 202.*

- Chem. 404 Advanced Inorganic Chemistry** **4 hours**
 A systematic discussion of the important phenomena of modern inorganic chemistry to include bonding and structure, kinetics, thermodynamics, acid-base theories and physical methods. Transition metal and organometallic chemistry are examined along with the chemistry of selected representative elements. (Three lectures and three hours of lab per week.) *Prerequisites: Chem. 326.*
- Chem. 411 Physical Organic Chemistry** **2 hours**
 A study of the theories and techniques relating structure and properties of organic compounds. *Prerequisites: Chem. 212; Chem. 322 or permission of the instructor.*
- Chem. 414 Advanced Organic Chemistry** **2 hours**
 A study of selected advanced topics in organic chemistry including reaction mechanisms. Lab is introduced, where appropriate, and stresses the use of instrumentation. *Prerequisites: Chem. 212; Chem. 322 or permission of the instructor.*
- Chem. 430-434 Special Topics** **2 hours each**
 A series of courses devoted to the consideration of advanced topics and areas of special interest in the fields of Analytical Chemistry (430), Inorganic Chemistry (431) Organic Chemistry (432), Physical Chemistry (433), and Biochemistry (434). *Prerequisite: Permission of the instructor.*
- Chem. 467 Cell Physiology** **4 hours**
 An introduction to the structural organization of cells and the important aspects of cell physiology in the light of modern biochemistry and biophysics. *Prerequisites: Chem. 211-212 or permission of the instructor.*
- Chem. 475 Polymer Science** **4 hours**
 A study of the methods of synthesizing, isolating, and characterizing polymers. The course includes the study of organic, inorganic, and biological polymers. Laboratory will involve the characterization of electrical, optical, thermal, molecular, and mechanical properties. *Prerequisites: Chem. 212; Chem. 320 or 322, or permission of the instructor.*
- Chem. 477-478 Seminar in Chemistry** **2 hours**
 Presentation of current research topics by students, faculty, and visiting lecturers.
- Chem. 480 Methods and Materials in Teaching Physical & Life Sciences** **4 hours**
 A study of the aims and methods of teaching the physical and life sciences in the secondary schools. Special attention is given to teaching general laboratory procedures and techniques of teaching. Each of the departments in the physical and life sciences participates in the program. (May be taken for credit as Ed. 480.) *Prerequisite: 16 hours in one of the physical or life sciences or permission of the instructor.*
- Chem. 487-488 Independent Study** **2 or 4 hours**
- Chem. 490 Senior Project** **2-8 hours**
 During the junior year the chemistry major is introduced to the methods of employing the chemical literature, selects a topic for advanced investigation, and makes a literature search of background material as a basis for an in-depth study in this area. There is one class meeting each week for both semesters. Following this preliminary work, an investigation of a significant topic in chemistry is made by each senior under the direction of a faculty member in the department. This work culminates in a written and oral report at the end of the senior year. *Fee. \$20.*

Communications

Aims

To prepare students to work in the media or with the media by studying the fields of broadcasting, advertising, public relations, or print media; to prepare students to enter the professional world of communications through courses emphasizing communication skills and others focusing on the structure of the media and their effects and impacts on individuals, groups, and cultures; to instill a sense of ethical and legal responsibility among future professional communicators.

Students may use the general communications curriculum to prepare for law, teaching, business management, and other closely related fields.

Requirements for Major

Comm. 101, 201, 206, 304, 403, 420; either 204 and 303, or 261, 271, and 310; either 401 or 402; either 301 or 302.

In addition, students will complete a Senior Project, take 12 hours in literature courses in English and/or a foreign language; take Phil. 124, and achieve a proficiency in a foreign language at the 230 level.

Normally students are expected to complete the required communications courses in the following order: freshman year — 101, 206; sophomore year — 201, 204 or 261-271, 301 or 302; junior year — 303 or 310, 304, 401 or 402; senior year — 403, 420, 490.

Appropriate courses outside the department can be recommended by advisors in the Communications Department.

It is recommended that a student in the department complete one of the following voluntary tracks: Print Media — 204, 295, 303, 306; Public Relations — 302, 320, 325, 405; Advertising — 301, at least 8 hours from 383, 384, 385, 404, 406; Broadcasting — 261, 271, 310, 311, at least 2 hours from 272, 361, 371. Advisors in the department can recommend for each track 4-6 hours of additional specialized Communications electives, generally taken in the junior and senior years.

Students must have achieved at least sophomore standing for enrollment in any of the 300- and 400-level courses in the department.

Comm. 101 Introduction to Mass Communications **4 hours**
The history and theory of mass communications, the newspapers, magazines, radio, television, books, movies, and adjunct agencies in modern society, and their effects on audiences.

Comm. 201 News Gathering and Writing **4 hours**
The study and practice of basic print and electronic news gathering and news writing, and writing skills, including grammar, as they relate to various subject fields. *Prerequisite: Facility in using Macintosh computers. (Details available from the Department of Communications.)*

Comm. 204 Copy Editing and Layout **4 hours**
The principles and practice in editing copy for publications; includes typography, layout, design of letterpress and offset newspapers, and use of computers. *Prerequisite: Comm. 201.*

Comm. 206 Interpersonal Communication: Public Speaking **4 hours**
An introduction to the dynamics of communication: levels of interaction between speaker and listener. Developing the use of voice and non-verbal signals; understanding oral style in language and logical argument in public speaking. Focus on the design and delivery of short speeches and on critical listening. (May be taken for credit as FAA 206.)

- Comm. 261 Radio Production and Performance** **2 hours**
A study of the basic audio production and performance techniques for radio. Laboratory experience in the WVBC radio studios.
- Comm. 271 Basic Television Production and Performance** **2 hours**
Lecture and laboratory experiences in field camera and audio, videotape editing, and performance. Introduction to lighting, studio operations, special effects, and TV graphics. *Prerequisite: Comm. 261.*
- Comm. 272 Intermediate Television Production and Performance** **2 hours**
Lecture and laboratory experience in studio production and direction, studio lighting, advanced videotape editing, and script writing. Development of leadership skills in TV production. *Prerequisite: Comm. 271.*
- Comm. 295 Publication Photography** **4 hours**
An introduction to the knowledge, skills, and techniques needed to produce quality black-and-white photographs for publication. Course covers both visual communication techniques and basic design and aesthetic concepts. Emphasis is on learning to meet specific news and other publications' photographic requirements effectively. (Two lectures and one four-hour lab per week.) *Prerequisites: Comm. 201 and junior standing.*
- Comm. 301 Principles of Advertising** **4 hours**
A study of history, philosophies, and principles of advertising, including a study of media markets and merchandising. Role and evaluation of advertising. Stress on copy writing and layout.
- Comm. 302 Principles of Public Relations** **4 hours**
A study of public relations as a process involving research, planning, communication, and evaluation. Analyzing publics and influencing their opinions. History, contributions, effects, laws, and ethics of the field. Development of a public relations plan for an organization.
- Comm. 303 Principles of Media Management** **4 hours**
This course emphasizes management issues in mass communications organizations. Subjects covered include what media companies do, the key functions of media leaders and managers, the areas of management within media organizations, and the management perspective on legal issues and issues of social responsibility.
- Comm. 304 Law of Mass Communications** **4 hours**
A study of the legal rights and limitations of the mass communications media in the United States.
- Comm. 306 Magazine Article Writing** **2 hours**
The role and contributions of U.S. magazines, historically and currently. Trends in writing style, editing, production, layout, advertising, promotion, reader research, and circulation. Practice in writing three articles for a professional journal and general circulation magazines.
- Comm. 309 Advanced Reporting** **2 hours**
A continuation of and building on the skills introduced in Beginning Reporting. Emphasis on reporting techniques, development and use of news sources, and writing of various types of stories. *Prerequisite: Comm. 201.*
- Comm. 310 Advanced Broadcast News Reporting** **2 hours**
A lecture-laboratory course dealing with the complexities of the electronic news gathering process. Emphasis on the use of state-of-the-art technology and its effects on news content and story organization. Field trips to local stations and guest speakers from the media. Students are required to gather and report news using the technology associated with radio, television, and cable. *Prerequisites: Comm. 201, 271.*
- Comm. 320 Public Relations Writing** **2 hours**
The practice of styles of writing used in public relations, including publicity, publications copy, scripting for audio and audio/video productions, and public relations advertising. *Prerequisite: Comm. 302.*
- Comm. 325 Public Relations Case Problems** **2 hours**
The application of the principles of public relations to actual and hypothetical cases. Consideration of practical, ethical, and legal implications of decisions made while managing public relations operations. *Prerequisite: Comm. 302.*

- Comm. 340-345 Special Topics in Mass Communications** **2 or 4 hours**
- Comm. 350 Persuasion** **4 hours**
A concentrated study of persuasion theory. Topics include learning theory, consistency theories, social judgment theory, motivation, the enthymeme, counterattitudinal advocacy, role-playing, and inducing resistance to persuasion. *Prerequisite: Comm. 206.*
- Comm. 355 Advanced Public Speaking** **4 hours**
The course focuses on specific types of speeches and rhetorical situations. Special emphasis is given to speechwriting and to the actual delivery settings for these speeches. Speeches include introduction, nomination and acceptance, eulogy, after-dinner, impromptu, question response, sales presentation, reports, etc. *Prerequisite: Comm. 206.*
- Comm. 361 Advanced Radio Production and Performance** **2 hours**
The study of advanced production and performance techniques for the radio broadcaster. Laboratory experiences in the WVBC radio studios. *Prerequisite: Comm. 261.*
- Comm. 371 Advanced Television Production and Performance** **2 hours**
The study of the integration of the technical and creative skills necessary for broadcast television production, both in studio and on location. Definition of creativity and its role in broadcast television. *Prerequisite: Comm. 272.*
- Comm. 383 Advertising Creativity** **4 hours**
The principles and practices of creating advertising for the print and electronic media. *Prerequisite: Comm. 301.*
- Comm. 384 Advertising Media Buying** **2 hours**
The study of the process of developing an advertising media plan. Extensive analysis and use of audience and marketing data for the print and broadcast media. *Prerequisite: Comm. 301*
- Comm. 385 Advertising Media Selling** **2 hours**
An examination of the theory and techniques of selling print and broadcast media to advertisers, including salesmanship and presentation. *Prerequisite: Comm. 301.*
- Comm. 390 Campus Media Management** **1 hour**
The student, working as a manager for a campus media organization, will develop leadership skills under the supervision of the medium's faculty advisor. Open only to managers of the campus media as determined by faculty advisors. May be repeated once in the same organization. Maximum of four credits total. (Letter grades for Communications majors; CR/NCR for others.)
- Comm. 401 History of American Mass Communications** **4 hours**
The history of newspapers, magazines, books, radio, and television as well as the related areas of public relations and advertising in the United States.
- Comm. 402 Public Opinion** **4 hours**
The nature and significance of public opinion. Includes studies of public opinion formation and measurement, the roles of news media, advertising, censorship, propaganda, political indoctrination, and other factors. Class assignments include surveys.
- Comm. 403 International Communications** **2 hours**
A comparative study of media systems: theory and practices in print and electronic media, advertising, public relations and journalism education in Europe, Asia, Latin America, the Middle East, and Africa.
- Comm. 404 Direct Response Advertising** **2 hours**
A study of theory and techniques of direct response advertising and promotion. Preparation of an original project and/or service to a profit or non-profit institution. *Prerequisite: Comm. 301.*
- Comm. 405 Public Relations Campaigns** **2 hours**
The handling of an organization's public relations program or an organization's special public relations campaign, including researching and analyzing the public relations situation, planning the program or campaign, and developing the various communications tools to be utilized. A competitive public relations agency model is used. *Prerequisite: Comm. 320 or 325.*

Comm. 406-407 Advertising Campaigns**2 hours**

The development of an advertising campaign including situation analysis, strategic advertising plan and some execution of specific creative and media tactics. A competitive agency model is used. *Prerequisite: Comm. 301, 383, or 384.*

Comm. 420 Professional Internship**2 hours**

Professionally supervised experience with an off-campus media organization or a communications agency. Assignments will allow for application of classroom materials and campus media experiences and will be similar to those experienced by new communications professionals. (Minimum of 160 hours required. Generally taken as a senior.) *Prerequisites: Two on-campus media experiences and a professional observation.* (Details about prerequisites available from the Department of Communications.)

Comm. 487-488 Independent Study**2 or 4 hours each****Comm. 490 Senior Project****2-8 hours**

Computer Science

Aims

To help students focus on programming as a discipline and the computer as a tool for solving problems. Students are prepared to recognize problems that can be solved with the aid of computers, to solve such problems individually and as a member of a team, and to develop their solutions through well-organized and well-documented structured programs which run efficiently. Students are also introduced to contemporary issues in the discipline and encouraged to assess how computer science relates to future employment or future formal education.

Requirements for Major

Two plans for majoring in Computer Science are offered — one leading to the Bachelor of Arts degree and the other to the Bachelor of Science degree.

The Bachelor of Arts plan is designed for those students seeking a career in computer science in a business environment.

The Bachelor of Science plan is designed for students seeking a career in computer science in a scientific lab or in a software development firm.

Requirements for the Bachelor of Arts Degree

The Bachelor of Arts degree requires C.S. 144, 201, 202, 290, 370, 380, 478, 490; Math. 201, 281; Acct. 211, 212, 220; Econ. 312; Eng. 209. Strongly recommended are C.S. 280; Econ. 200, 280; Acct. 425. Other recommended courses include Comm. 206, 301, 302; G.S. 210; Phil. 124. Beginning students are expected to complete C.S. 201 and Math. 201 during the first semester.

Requirements for the Bachelor of Science Degree

The Bachelor of Science degree requires C.S. 201, 202, 280, 290, 330, 370, 380, 478, 490; Math. 201, 202, 354, 383; Phys. 201, 202. Beginning students are expected to complete C.S. 201 and Math. 201 during the first semester.

C.S. 140-150 Introduction to Programming **2-4 hours each**

The following courses provide an introduction to computers by programming in a high level language on the Prime computer. The emphasis is programming real-life problems using efficient coding techniques. These courses are directed towards the student who wants to use the computer as a problem-solving tool.

C.S. 140 Introduction to Programming Using BASIC **2 hours**

This course is directed toward the non-science student. Not recommended for students who have successfully completed any other computer language course.

C.S. 142 Introduction to Programming Using FORTRAN **2 hours**

The programming assignments in this course will involve applications to science problems.

C.S. 143 Introduction to Programming Using PL 1 **4 hours**

The programming assignments in this course will involve applications to science problems.

C.S. 144 Introduction to Programming Using COBOL **4 hours**

The programming assignments in this course will involve applications to business problems.

C.S. 145 Introduction to Programming Using RPG II **2 hours**

The programming assignments in this course will involve applications to business problems.

C.S. 150 Programming for Science Applications **4 hours**

This course will teach methods of structured programming and will use both FORTRAN 77 and PASCAL as computer languages. All programming will involve scientific applications.

Prerequisite: Permission of instructor.

C.S. 200 Computer Applications in the Social Sciences **2 hours**

A study of computer techniques applied to social and behavioral sciences. Topics include language selections, matrix manipulation, statistics (basic), analysis of variance, correlations and regression, econometrics, and profit analysis packages.

C.S. 201 Computer Science I **4 hours**

This beginning course for computer science majors may also be taken by others who wish to learn PASCAL. The emphasis is on techniques of algorithm development, structured programming and debugging techniques as they apply to the PASCAL language.

C.S. 202 Computer Science II **4 hours**

An introduction to operating systems, data structures, computer organization, and files. The data base management system INFO by Henco will be introduced and employed. The programming assignments will provide the students with advanced features of PASCAL and an introduction to PL 1. *Prerequisite: C.S. 150 or C.S. 201.*

C.S. 222 Digital Electronics **4 hours**

An introduction to digital electronics with applications in instrumentation and computer electronics. Topics include Boolean Algebra, basic gates, logic families, encoders-decoders, astable/monostable multivibrators, flip-flops, counters, readouts, shift registers, bi-directional bus structure, serial-parallel/parallel-serial data conversion, D to A and A to D conversion. (Three hours of lecture and two hours of lab each week. May be taken for credit as Phys. 222.) *Prerequisite: Math. 103 or equivalent or permission of the head of the department.*

C.S. 280 Assembly Language **4 hours**

A study of Assembly language programming methods. Topics include computer organization, Assembly process, Assembly coding, addressing, binary arithmetic, storage allocation, character and bit manipulation, and debugging techniques. *Prerequisite: C.S. 202.*

C.S. 290 Data Structures **4 hours**

A study of basic concepts and their representation, including linear lists, strings and string processing, algorithms, and arrays, storage allocation and representation of arrays, storage systems and structure, and storage allocation and collection. *Prerequisite: C.S. 202.*

C.S. 310 Discrete Structures **4 hours**

Fundamental algebraic, logical, and combinatorial concepts of computer science. Topics include graph theory, monoeds and finite automata, lattices and Boolean algebras.

- C.S. 330 Computer Organization** **4 hours**
 The application of Boolean algebra to combinational circuit design problems, organization of simplified computer components, adders, arithmetic and logical units, memory organization, architecture, and physical realization of computer systems. *Prerequisite: C.S. 202.*
- C.S. 370 Operating Systems** **4 hours**
 The study of batch processing systems, implementation techniques for parallel processing of input/output and interrupt handling, memory management, system accounting, interprocess communication and interfaces, and deadlocks. *Prerequisite: C.S. 280.*
- C.S. 380 Introduction to Data Base Design** **4 hours**
 This course presents an in-depth study of the design and the implementation of a data base. Topics include architecture of a data base, the three approaches (relational, network, and hierarchical) to a data base. Also included is the use of INFO, a relational data base management system by Henco. *Prerequisite: C.S. 290.*
- C.S. 390 Numerical Analysis** **4 hours**
 The study of numerical methods of evaluating integrals and differential equations. Techniques in finding the roots of polynomials and solving systems of linear equations and matrix manipulation. (May be taken for credit as Math. 390.) *Prerequisites: C.S. 142, 143, or 201 and Math. 201, 202.*
- C.S. 400 Interactive Computer Graphics** **4 hours**
 A study of graphics on the microcomputer using Turtle Graphics and the UCSD PASCAL. *Prerequisite: One high level language other than BASIC.*
- C.S. 410 Computer Simulation** **2 hours**
 An examination of simulation methodology including generation of random numbers and variates, analysis of data generated by simulation experiments, and validation of simulation models. Introduction to queuing theory. Selected simulation applications. *Prerequisite: Math. 383.*
- C.S. 450 Data Base Concepts** **2 hours**
 An introduction to the concept of a data base. Topics include data organization and structure data security. Also discussed will be a comparison of data base approaches and access methods. Some programming assignments will be in INFO, the data base management system by Henco. *Prerequisite: C.S. 202.*
- C.S. 460 Programming Language Structures** **4 hours**
 A study of programming language constructs emphasizing the run-time behavior of programs. Topics include: formal grammars, parsing, information binding, data storage, global and local variables and parameters, string handling and list processing. *Prerequisite: C.S. 202.*
- C.S. 478 Senior Seminar** **2 hours**
 The study of topics in computer science.
- C.S. 482 Computers in Education** **2 hours**
 A study of microcomputers and software available for classroom use. Methods for evaluating software will be discussed. Students will design classroom applications using LOGO or some other software package. *Prerequisite: Permission of Instructor.*
- C.S. 487-488 Independent Study** **2 or 4 hours**
- C.S. 490 Senior Project** **2-8 hours**

Developmental Studies

Developmental Studies is a grouping of courses designed to provide academic assistance during the freshman year to students who need it. Each course is graded on a credit/no credit basis. Students who complete one of these courses successfully receive 2 credit-hours toward graduation.

Students may take as many of the courses as needed, but of the 128 semester hours credit required for a Bethany College degree, no more than 4 credit-hours may be earned in Developmental Studies courses.

Dev. Stu. 100 Reading **2 hours**

A course providing basic instruction in reading and comprehension skills. Emphasis is placed upon the specific areas of word recognition, vocabulary, and comprehension. The Special Advising Program section uses the Strategies Intervention Model and Learning Strategies Curriculum. (CR/NCR only.) *Permission of the instructor.*

Dev. Stu. 105 Mathematics **2 hours**

A course providing developmental mathematics instruction for the college student who wishes to improve abilities in mathematics. Emphasis is placed upon conceptual understanding of basic mathematics with corresponding computational skill development. (CR/NCR only.)

Dev. Stu. 110 Writing **2 hours**

A course providing instruction and practice in basic composition for freshmen. Emphasis is placed on organization, mechanics, and clarity. The Special Advising Program uses the Strategies Intervention Model and the Learning Strategies Curriculum. (CR/NCR only.) *Permission of the instructor.*

Dev. Stu. 115 Strategies for College Success **2 hours**

A course providing general skills for success on the college level. Emphasis is placed on both the attitudes and behaviors which enable students to be successful on the college level. Topics covered include goal setting, taking responsibility for being successful, effective communication, healthy lifestyle, time management, test-taking, increasing memory, note-taking, and textbook reading. Course begins one week prior to the official first day of classes. (CR/NCR only.) *Additional fee required.*

Economics & Business

Aims

The Department of Economics and Business offers two majors: Economics and Accounting. Both majors are based in the liberal arts and emphasize the application of techniques drawn from economics and mathematics to business problem solving. The department's courses cultivate the ability to apply knowledge and to develop proficiency in the use of analytical tools for making decisions in business, government, and society. The majors and courses serve as preparation for work in business, government, law, public service, and graduate study.

Requirements for Major

All majors in the department are required to complete the following courses: Econ. 200, 301, 302; and Math. 201, 281, 282. Students considering majoring in the department should complete all of the 200-level courses listed above by the end of their sophomore year.

Economics

In addition to the courses required of all departmental majors, students majoring in Economics are required to complete one of two tracks.

Managerial Economics: Econ. 280, 290, 312, 477; Acct. 210 or 220, 211, 212, and a Senior Project in Economics. Students choosing the Managerial Economics track are limited to 12 hours in Accounting beyond the required courses (Acct. 210 or 220, 211, and 212).

International Economics: Econ. 210, 260, 270, 477; Pol. 243, 328; and a Senior Project in Economics.

Accounting

In addition to the courses required of all departmental majors, students majoring in Accounting are required to complete Acct. 211, 212, either 210 or 220, 312, 313, 314, 425, 435, 461, 478, and a Senior Project in Accounting. Students with a major in Accounting are limited to 12 hours in Economics beyond the required courses (Econ. 200, 301, and 302).

Requirements for Minors

Economics: Econ. 200, 301, 302; Math. 201.

Accounting: Acct. 210 or 220, 211, 212, 425; Math. 281, 282.

Management: Econ. 200, 280, either Econ. 210 or Acct. 220; Acct. 211; Math. 231, 281, 282; Psych. 287.

Requirements for Teaching Certification

Only Economics majors who have completed the following courses will be recommended for state certification to teach Social Studies in the secondary schools: Hist. 101, 201, 202, 225; Soc. 100; Econ. 200; G.S. 202 or Soc. Sci. 302; Pol. 225; I.S. 100; R.S. 100; Soc. Sci. 480; the requirements for certification for Social Studies Middle Childhood Education 5-8; the courses in the professional education sequence described in the listing of the Education Department (Ed. 201 and the minor in Secondary Education). *Soc. Sci. 480 is prerequisite to student teaching.*

Economics & Business

Econ. 101 Personal Finance

4 hours

This course aims to develop an understanding of the concepts needed for intelligent consumer decision-making. The course covers budget policies, borrowing, installment buying, marketing techniques, and consumer purchases in the areas of food, clothing, automobiles, housing, social insurance, personal insurance, pension programs, investment markets, and estate building. (*Not recommended for students with a major in the Department of Economics and Business.* Offered every third year.)

Econ. 103-104 Students in Free Enterprise

1 hour

An activity course for students participating in the Bethany chapter of Students in Free Enterprise (SIFE). SIFE participants engage in a variety of programs designed to increase public awareness of economic issues. Selected students from the organization participate in regional competition. (Activity course: CR/NCR only.)

Econ. 111 Introduction to Economics and Business **2 hours**

An introduction to the department's programs. The course explores the development of economic analysis, the institutions of capitalism and their relationships to other social institutions, and the structure, procedures, and objectives of the contemporary American business community. *Recommended for all first semester students in the department. Not recommended for students who have previously taken other courses in the department.*

Econ. 200 Principles of Economics **4 hours**

An examination of the fundamental concepts, principles, and problems of modern economics. Alternative methods of settling economic questions will be explored with special emphasis on the functioning of the market system. Topics covered will include the institutions of capitalism, basic economic laws, rationing problems, income distribution, business structures, the labor movement, the role of government, national income accounting, business cycles, banking and monetary policy, Keynesian analysis and fiscal policy, and concepts of international trade.

Econ. 210 Microcomputing in Economics and Business **1 hour**

An introduction to spreadsheet analysis, statistics, data management, graphics, and word processing on MS-DOS microcomputers. (Activity course: CR/NCR only. May be taken for credit as Acct. 210.)

Econ. 260 Comparative Economic Development **2 hours**

A study of the alternative paths to economic development modernization taken by England, the United States, France, Germany, and Russia. The course is organized around the historical time line of the emergence of market economics, the industrial revolution and its spread, and the late 19th and early 20th century problems of modern economic systems.

Econ. 270 Comparative Economic Systems **2 hours**

An examination of the post World War II performance of the industrialized economies. The course compares the relative economic performance of the market capitalist economies and the centrally planned socialist economies. Attention will be focused on the recent developments in Eastern Europe. The course will conclude with a brief survey of the less developed economies and their prospects for economic modernization.

Econ. 280 Managerial Economics **4 hours**

A study of profit-maximizing managerial decision-making with emphasis on the external environment of the firm. The course will introduce students to quantitative techniques of decision-making. *Prerequisite: Econ. 200*

Econ. 287 Organizations and Human Behavior **4 hours**

A study of specific aspects of organization culture such as motivation, conflict, power, and leadership. Exercises and simulations are emphasized which focus on improving the effectiveness of organizations by strengthening human processes. (May be taken for credit as Psych. 287.)

Econ. 290 Principles of Marketing **4 hours**

An introduction to fundamental concepts that will help improve marketing decision making. The student will be introduced to the language of marketing, as well as the concepts of marketing strategies, and pricing. *Prerequisite: Econ. 200.*

Econ. 300 Business and Society **4 hours**

An exploration of the interface of business with government and society. The course explores management action in situations involving significant political and social factors. *Prerequisite: Econ. 200. Open only to juniors and seniors.*

Econ. 301 Intermediate Price Theory **4 hours**

An intermediate level study of resource allocation, price determination, output determination, and income distribution at the micro level under various market conditions. Mathematical analysis and model building will be used whenever appropriate. *Prerequisites: Econ. 200; Math. 201, 281.*

Econ. 302 Intermediate Macroeconomic Theory **4 hours**

A study of the determinants and the behavior of the national economy, including consideration of production, employment, and price levels. Mathematical analysis and model building will be used whenever appropriate. *Prerequisite: Econ. 200.*

- Econ. 312 Managerial Finance** **4 hours**
 An exploration of corporate organizations and the planning of financial requirements. The course includes an intensive study of cash flow, budgeting, capital decisions, internal financing, and corporate reorganization. *Prerequisites: Acct. 211, 212, and 220.* (May be taken for credit as Acct. 312.)
- Econ. 316 Money, Banking, and Fiscal Policy** **4 hours**
 A study of the behavior of various money markets and the operation of commercial banks, the Federal Reserve System, and the Treasury Department, including an analysis of tax revenues, expenditures, and debt-financing. *Prerequisite: Acct. 212.* (Offered alternate years.)
- Econ. 325 Investment Management** **4 hours**
 A critical study of the various types of investment instruments and the relative merits of each. In addition, the course explores investment procedures, security analysis, security rating, portfolio theories, and portfolio analysis. *Prerequisites: Econ. 200; Acct. 212; and Math. 281.* (Offered alternate years.)
- Econ. 330 Business Law** **4 hours**
 An introduction to the nature and development of law with particular emphasis on the legal aspects of contracts and other business instruments as set forth in the Uniform Commercial Code. In addition, some of the legal aspects of partnerships and corporations will be presented. (May be taken for credit as Acct. 330.)
- Econ. 340 Industrial Organization and Public Policy** **4 hours**
 A study of the structure, conduct, and performance of modern industry and the public policies designed to influence those aspects of modern industry. On each topic covered in the course, explicit comparisons will be drawn between the modern American economy and the modern Japanese economy. *Prerequisite: Econ. 200.*
- Econ. 341 Labor Problems** **4 hours**
 A general course in labor economics with an emphasis on trade unionism. Attention will be paid to the history and objectives of organized labor, employment and wage theory, managerial labor practices, collective bargaining, current economic and political aspects of labor management, and labor law. *Prerequisite: Econ. 200.* (Offered alternate years.)
- Econ. 346 Industrial Organization** **4 hours**
 A study of the structure, conduct, and performance of modern American industry. The course emphasizes those factors which account for the decline of large-scale manufacturing enterprises and the emergence of smaller enterprises and more competitive industrial markets. *Prerequisites: Econ. 200; Math. 281.* (Offered alternate years.)
- Econ. 350 Business Cycles and Forecasting** **4 hours**
 An exploration of economic fluctuations in the modern American economy against the backdrop of the alternative theories utilized to explain these fluctuations. Students in the course will be exposed to the quantitative data which describes the cycles and the analytical techniques which are utilized to generate economic forecasts. *Prerequisites: Econ. 200; Math. 281.*
- Econ. 360 International Trade** **4 hours**
 An examination of the principles of international trade and finance and their application to the modern world. Topics include exchange rates, theories of comparative advantage, economies of scale, tariffs, quotas, commercial policy, capital movements, reciprocal effect of changes in micro and macroeconomic policies, the role of international organizations, and aid to less developed countries. *Prerequisite: Econ. 200.*
- Econ. 399 Problems in Business Administration** **2 or 4 hours**
 An exploration of selected management problems related to the total enterprise and emerging technostucture. The course also covers managerial and corporate strategy, utilization of resources, and the functional disciplines of management. *Prerequisite: Econ. 200 and permission of the instructor.*
- Econ. 470 Internship in Management** **4-8 hours**
 An internship to provide students with an extensive off-campus learning experience in a management setting. The internship involves off-campus work and a substantive written project. Approval by the department of both the work experience and the academic project is required. The internship must be jointly supervised and evaluated by a member of the faculty and an approved off-campus mentor.

Econ. 477 Senior Seminar	2 hours
Acapstone course integrating the student’s background and previous courses in economics. Microeconomics, and econometrics are reviewed in terms of their historical development. <i>Prerequisite: Senior standing in Economics or permission of the instructor.</i>	
Econs. 487-488 Independent Study	2 or 4 hours
Econ. 490 Senior Project	2 hours
The Senior Project is open only to students majoring in Economics. Students will prepare and present a senior project. The topic for the senior project should be selected before the end of the junior year and must be approved by the head of the department.	

Accounting

Acct. 210 Microcomputing in Economics and Business	1 hour
An introduction to spreadsheet analysis, statistics, data management, graphics, and word processing on MS-DOS microcomputers. (Activity course: CR/NCR only. May be taken for credit as Econ. 210.)	
Acct. 211 Principles of Accounting I	4 hours
An introduction to the principles and procedures accountants use to process financial information and to present income statements and statements of financial position to external users of the organizations’ financial information. Students will study the accounting system’s methods of collecting, analyzing, measuring, recording, processing, and finally presenting financial information.	
Acct. 212 Principles of Accounting II	2 hours
A continuation of the study of accounting principles and procedures begun in Accounting 211. <i>Prerequisite: Acct. 211.</i>	
Acct. 220 Microcomputer Applications in Accounting	2 hours
An introduction to financial analysis on personal computers including the common command sets, the design and use of spreadsheets, macros, and the design and manipulation of microcomputer based data bases. <i>Prerequisite: Acct. 211.</i>	
Acct. 312 Managerial Finance	4 hours
An exploration of corporate organizations and the planning of financial requirements. The course includes an intensive study of cash flow, budgeting, capital decisions, internal financing, and corporate reorganization. <i>Prerequisites: Acct. 211, 212, and 220.</i> (May be taken for credit as Econ. 312.)	
Acct. 313 Intermediate Accounting I	4 hours
A presentation of the theoretical foundation of accounting concepts and principles. The course provides an extensive study of the accounting process with emphasis on accounting for cash and temporary investment, receivables, inventories, plant assets, and long-term investments. <i>Prerequisite: Acct. 212.</i>	
Acct. 314 Intermediate Accounting II	4 hours
A continuation of Acct. 313 with emphasis on accounting for liabilities, notes, leases, pensions, and owner’s equity. Attention is given to special problems in income determination, income taxes, earnings per share, and changing prices. The course concludes with financial statement analysis. <i>Prerequisite: Acct. 313.</i>	
Acct. 330 Business Law	4 hours
An introduction to the nature and development of law with particular emphasis on the legal aspect of contracts and other business instruments as set forth in the Uniform Commercial Code. In addition some of the legal aspects of partnerships and corporations will be presented. (May be taken for credit as Econ. 330.)	
Acct. 352 Accounting for Not-for-Profit Organizations	4 hours
A study of accounting systems used to process the financial information of economic organizations not having profit as their primary goal. Students will work on budget preparation and uses and the integration of budgets into the accounting model of assets equalling equities and debits equalling credits. <i>Prerequisite: Acct. 212.</i> (Offered alternate years.)	

Acct. 425 Cost Accumulation and Control **4 hours**
A study of cost accumulation systems, job order and process, cost controls, flexible budgets and standard costs, and cost, volume, profit relations. Together with the intermediate accounting sequence this course provides a solid foundation in accounting. *Prerequisites: Acct. 212 and either Acct. 314 or permission of the instructor.*

Acct. 435 Advanced Accounting **4 hours**
An introduction to accounting concepts concerning partnership organization and liquidation, branch accounting, consolidated financial statements, bankruptcy and corporate reorganization, and financial reporting by multinational companies. *Prerequisite: Acct. 314.*

Acct. 441 Federal Income Taxation of Individuals **4 hours**
A study of federal income tax law and implementing Treasury Department regulations and procedures governing federal taxation of individuals. Provides a general knowledge of federal individual income taxation rather than specific instructions in completing individual federal tax returns. *Prerequisite: Acct. 212 or permission of the instructor.*

Acct. 461 Financial Auditing **4 hours**
An introduction to auditing principles and procedures as they are used to determine the fairness of an organization's financial statements. Studies generally accepted auditing standards, auditors' opinions, internal control, and ethical, legal, and professional responsibilities of auditors. *Prerequisites: Acct. 425 and Acct. 435.*

Acct. 478 Senior Seminar **2 hours**
A capstone course integrating the student's background, experience, and previous curriculum in accounting. *May not be taken before the senior year.*

Acct. 490 Senior Project **2-8 hours**
Open only to students with a major in Accounting. Students will prepare and present a senior project. *The topic for the senior project must be approved by the Head of the Department of Economics and Business.*

Education

Aims

To develop a teacher who is a self-directed decision maker who recognizes the need for personal and professional growth, has the skills necessary to pursue it, and is secure enough to engage in personal and professional self-evaluation.

To develop a teacher who can recognize the needs of young people and utilize the liberal arts background, content preparation, and the principles of education in attempting to meet those needs and facilitates the acquisition of knowledge for that purpose and who can provide an educational environment to enhance the development (social, emotional, cognitive, and physical) of individuals so that they may make sense of their world and make decisions effectively within that world.

To develop a teacher who can interact effectively within the community and school environment and has the skill and willingness to communicate with people of all ages and backgrounds.

To develop a teacher who analyzes emerging trends and thinks critically about them in an attempt to arrive at a human balance between the needs of the child, the needs of society, and personal needs in order to perform effectively and ethically.

In summary, to develop a teacher who is a perceptive and aware person who can utilize intellectual skills and knowledge to think critically and pursue self-directed goals.

Requirements for Majors

All students majoring in Education must complete one of the programs described below.

Elementary Education (K-8): Required is the completion of the sequences of study for Multi-Subjects K-4 and 5-8. (Additional information is on page 60 of this **Bulletin**.) Specific course requirements are listed in the Department's *Guide to Teacher Education*.

Middle Childhood Education (5-8): Required is the completion of the Professional Education Sequence and two teaching fields selected from French, General Science, German, Language Arts, Mathematics, Physical Education, Social Studies, and Spanish. (Additional information is on page 60 of this **Bulletin**.) Specific course requirements are listed in the Department's *Guide to Teacher Education*.

Education (Non-School Seetings): Required is the completion of Ed. 201, 202, 242, 302, 348, 401, 475, 490; Sp.Ed. 410; an approved sequence of courses in an area of specialization. (Additional information is on page 61 of this **Bulletin**.)

Requirements for Minors

Secondary Education: Ed. 202, 242, 348, 401, 410, 428, 440, 470. (Students seeking 5-12 certification should also take Ed. 201.)

Specific Learning Disabilities: Sp.Ed. 205, 206, 310, 320, 470 or 475; Psych. 315. (Students seeking K-8 certification should complete the sequence for Elementary Education K-8 described above.)

Requirements for Teacher Certification

A student preparing for certification must plan to complete: (1) the requirements for graduation as described on page 14, (2) the testing program required by the West Virginia Board of Education in the areas of reading, mathematics, writing, speaking, and listening, (3) a selection of courses providing appropriate background for teaching in a particular field, (4) a sequence of professional education courses and experiences designed to give broad understanding of concepts and skills in teaching.

Bethany is accredited by the National Council for the Accreditation of Teacher Education (NCATE) and is a party to the interstate compact for reciprocity in certification through the West Virginia Board of Education approval of all certification programs offered at Bethany College.

To become eligible for teacher certification, the student must complete a College and state-approved program. It is the student's responsibility to seek appropriate counseling from the Education Department, preferably early in the freshman year, and to become familiar with all of the requirements. *A Guide to Teacher Education*, available in the Education Department Office, gives a full description of all programs.

The department recognizes abilities which students may already have in a given subject matter area and assists them in planning their program accordingly. Waivers or advanced standing granted by the College can be noted on official transcripts so that courses from which a student is exempted may be applied toward certification.

Leadership of children and youth groups, summer camps, scouts, church school, playground supervision, etc., is strongly recommended.

A period of observation and participation in a school is an important and integral part of the education curriculum. Education students are encouraged to consider observation and participation in an educational agency when planning their intercultural and/o citizenship practicum.

Professional Education

Students preparing to teach at any level must complete the sequence of required professional courses. Required courses cannot be taken credit-no credit.

First Semester	Credit	Second Semester	Credit
Freshman			
Psych. 100 General Psychology	4		
Sophomore			
Ed. 201 Human Development I	4	Ed. 202 Human Development II	4
		Ed. 242 Principles and Curriculum in the Public School	2
(Students must apply for admission to Teacher Education during Ed. 242)			
Junior			
Appropriate methods course(s)	2-4	Ed. 348 Professional Practicum	4
		Appropriate methods course(s)	2-4
(Students must apply for the Professional Year during Ed. 348)			
Senior Professional Block			
Sp. Ed./Psych. 410		Ed. 401 History and	
Test and Measurements	2	Philosophy of Education	2
Ed./Sp. Ed. 470 Observation and Directed Teaching	8		
Ed. 440 Teaching Reading in the Content Areas	2		
Appropriate methods seminar(s)	4		
(No other courses permitted)			

Elementary Education (K-8)

A student seeking certification to teach in the elementary school must follow the course of study for MULTI-SUBJECTS K-4 and 5-8. This allows the student to teach in the self-contained classroom. In addition to the Professional Education requirements listed, the student must take related, required courses. A complete listing of these courses is available from the Education Department and is contained in the *Guide to Teacher Education* (available from the department).

Students preparing to teach should discuss their program with the Head of the Education Department. Students are encouraged to pay special attention to Perspectives course choices. A Middle Childhood Specialization may be added to the elementary certificate if all requirements for both levels are met. Specific Learning Disabilities certification is also available to the student who wishes to teach in special education (see below).

The *Guide to Teacher Education*, available in the Education Department office, has specific information about required and related course work.

Middle Childhood Education (5-8)

Students preparing to teach in middle childhood settings (Middle School and Junior High School) will follow the Professional Education Sequence listed. They must choose two teaching fields from Mathematics, Language Arts, Social Studies, General Science, French, German, Spanish, and Physical Education.

Students preparing to teach at the middle childhood level should discuss their programs with the Head of the Education Department. Two teaching fields are required for a degree in education and certification in West Virginia. Middle Childhood certification may be added to elementary or secondary certification with the advisement and permission of the Education Department. A *Guide to Teacher Education* gives a full description of all programs leading to certification in West Virginia. The *Guide* is available in the Education Department.

Each student is responsible for planning a program for meeting certification requirements.

Education (Non-School Settings)

The Education Department provides for a major without public school certification to allow students to prepare for a variety of roles in non-school settings, such as 1) training program development and implementation in business and industry, 2) policy planning roles in state and federal agencies, and 3) higher education instruction in foundation areas.

Courses required are Sp. Ed. 410; Ed. 201, 202, 242, 302, 348, 401, 475, and 490.

In addition, each student will propose a program of study in one of the following areas of specialization: Human Resources Management and Training, Education Policy Planning, Educational Foundations, or other identified pre-professional areas of study within the discipline. Courses will be determined through the development of a program proposal based upon the student’s career and study goals.

Secondary Education

Students preparing to teach in secondary schools are expected to follow the sequence of required education courses listed in the Professional Education sequence. General distribution requirements, other requirements for graduation, and requirements for the student’s major must be added. The required education courses cannot be taken Credit-No Credit.

Students preparing to teach at the secondary level should discuss their program with the Head of the Education Department, as well as the person responsible for the Teacher Education Program in the major field. Students interested in French, German, Spanish, Mathematics, English, Social Studies, General Science, and Physical Education must complete the Middle Childhood (5-8) program in their field. Physical Education candidates may plan for K-12 certification. A *Guide to Teacher Education* gives the full description of all programs leading to certification in West Virginia. The *Guide* is available in the Education Department.

Teaching fields include: Biology, Chemistry, Physics, French, German, Spanish, English, Physical Education, Social Studies.

Specific Learning Disabilities (K-8)

Certification for teaching the child with specific learning disabilities is available as a specialization for the elementary certificate. Students who are interested in this area of special education must take the required special education courses in addition to the multi-subjects and professional education courses. Further information is available from the Education Department and is contained in the *Guide to Teacher Education*.

Psychology/Education Interdisciplinary Program

The Education Department and the Psychology Department offer an Interdisciplinary Degree for students interested in preparing for school and child related careers. Information concerning this program can be obtained from the Education Department or the Psychology Department.

Admission to Teacher Education

During Ed. 242 (Principles and Curriculum in the Public School), written application for admission to teacher education should be submitted to the Education Department on forms obtained from the department office.

The following criteria must be met to be admitted to the program:

1. Grade point average: 2.50 overall, in education, and in proposed field of study.
2. Two positive recommendations from faculty and/or staff of Bethany College.
3. Successful scores on the Preprofessional Skills Test (reading, mathematics, and writing).
4. Positive recommendation by Education Department.

The student may be granted full admission, provisional admission, or may be denied admission. Appeal of the decision can be made through the Director of Teacher Preparation Programs to the Educational Personnel Preparation Advisory Committee. A full description of criteria and procedures can be found in the *Guide to Teacher Education*.

Retention

A student must maintain the required level of performance and must show continued professional behavior. A student's qualifications may be reviewed at the end of any semester if such a review is deemed necessary.

Admission to the Professional Year

During Ed. 348 (Professional Practicum), each student must apply for admission to the professional year which includes student teaching. The following criteria must be met:

1. Successful completion of the speaking activities on ACT-Comp.
2. Successful completion of the Listening Test.
3. Grade point Average: 2.50 overall, in education and in the field(s) of study.
4. Positive recommendations from the department in which the student is seeking certification.
5. Positive recommendation from the Education Department.
6. All appropriate prerequisite courses must have been successfully completed.

The student may be granted full admission, provisional admission, or may be denied admission. Appeal of the decision can be made through the Director of Teacher Preparation Programs to the Educational Personnel Preparation Advisory Committee. A full description of criteria and procedures can be found in the *Guide to Teacher Education*.

Application for Certification

Following completion of student teaching and near the completion of the program, each student should initiate application procedures for certification. The following criteria must be met for certification in West Virginia:

1. Grade Point Average: 2.50 overall, in education, and in the area(s) of certification.
2. Successful completion of the West Virginia Board of Education Subject Area competency examination.
3. Successful completion of the Comprehensive Examination in the major and in Education (Secondary Certification candidates should see the Head of the Education Department).
4. Successful completion of student teaching and all required course work.
5. Recommendations from the Education Department and from the student's area of certification.
6. All requirements for the initial degree must be met.

Note: Graduation from Bethany College does not guarantee certification in the state of West Virginia. The student must meet all the criteria for certification as determined by the College and by the West Virginia Board of Education.

All required testing can be arranged through the Education Department at the appropriate times in the student's career at Bethany College.

The student may be recommended for full certification at the initial level, or may be eligible for a temporary permit. A student who fails to meet criteria may be denied recommendation. Appeal of the decision can be made through the Director of Teacher Preparation Programs to the Educational Personnel Preparation Advisory Committee. A full description of criteria and procedures can be found in the *Guide to Teacher Education*.

Competency-Based Professional Block

Student teaching is conducted for the entire first semester of the senior year in area schools or off-campus centers. Related course work is integrated with student teaching to provide direct application to field experience. Students assigned to off-campus centers may need to live in the community where the center is located. The College will assist in locating housing if desired, and with other details of the arrangement.

Students are not permitted to schedule courses in conflict with the block during the semester they are enrolled in it, or carry extra-curricular activities which interfere with the requirements imposed by the block. Arrangements can usually be made for practice and participation in varsity sports. Any exceptions to the above must be approved by the head of the department concerned and by the Dean of the Faculty. Students should *not* register for other than the prescribed Professional Block courses without written permission from the Education Department.

Ed. 201 Human Development I	4 hours
The study of individual and group development from infancy to adolescence. Observation and first-hand contacts with children are included. Educational programs are considered in terms of the total child development. <i>Freshmen not admitted.</i>	

Ed. 202 Human Development II	4 hours
The study of individual and group development from adolescence through senescence. Applications are made in relation to learning theory, self-understanding, and preparation for working with young people. <i>Freshmen not admitted.</i>	

Ed. 242 Principles and Curriculum of the Public School 2 hours

An introductory course exploring the goals of education and their implementation, the role of the teacher, and professional concerns while applying the concepts of human development.

Ed. 275 Student Development in Higher Education 2 hours

A study of the philosophy of higher education and the development of the individual student within the college environment. Emphasis is placed upon personal growth, communication skills, group dynamics, and residence hall programming. Didactic and experiential learning in the areas of personal, academic, and vocational counseling is included. *Enrollment limited to Resident Assistants.* (May be taken for credit as Psych. 275.)

Ed. 300-309 Issues in Education

Courses focusing on special topics in Education for majors and non-majors.

Ed. 300 Juveniles, Law, and School 4 hours

A review of the social and legal status of juveniles to 1899, through the Warren Court, and today. Law libraries, Supreme Court, decisions, juvenile authorities, detention centers, and school and college authorities will provide applications for the basic concept of justice as it applies to juveniles in this country.

Ed. 301 Educational Ethnography: Field Research in the Schools 4 hours

An investigation of the process of constructing, through direct observation, a theory of the working of a particular culture (i.e., schools). Students study the theoretical base, rationale, and methodology used in collecting and analyzing data by means of an ethnographic approach.

Ed. 302 School and Society 4 hours

A study of the role of schools in a society, of the school as a formal and informal organization, and of the function of schooling. The course applies the methodologies of the disciplines of education, sociology, and other social sciences. Case studies and on-site observations combine with a variety of readings to provide a wide range of viewpoints for students to evaluate. (May be taken for credit as Soc. 302.)

Ed. 328 Human Sexuality 2 hours

An examination of psychological, biological, social, comparative, legal, and ethical aspects of human sexuality. In addition to sexual anatomy, physiology, birth control, and sexually transmitted disease, the course takes up current issues such as a sex-role development and sex therapy. (May be taken for credit as Psych. 328.)

Ed. 344 Teaching Skills Laboratory Non-credit

The study and practice of specific teaching skills related to the technical and media areas of education. Students must complete the required work prior to student teaching. Information related to the course work is available from the Education Department office.

Ed. 345 Methods and Content in Elementary and Middle Childhood I: Mathematics 4 hours

The practical application of arithmetical skills, including the understanding of fundamental processes, comparison of different philosophies in teaching arithmetic, the elements of modern math, and the theoretical and practical application of the metric system at all levels of the curriculum. Classroom experience in public schools. *Prerequisites: Math. 250 or permission of the instructor; Ed. 242.*

Ed. 346 Methods and Content in Elementary and Middle Childhood II: Language Arts 4 hours

An exploration of teaching the skills of reading, listening, speaking, and writing as they relate to the total curriculum. Emphasis on teaching of reading and the integration of the related areas in language arts. Students are expected to demonstrate competence in appropriate audio-visual aids. Classroom experience in public schools. *Prerequisite: Ed. 242.*

Ed. 348 Professional Practicum 4 hours

An experience to prepare the prospective teacher for a professional role as observer and participant in the classroom. *Prerequisite: Ed. 242.*

Ed. 350 Reading: Diagnosis and Prescription **2 hours**

The study of methods for dealing with reading disabilities within the content areas. Format will include diagnosis of specific problems and their origins as well as prescription for correction and remediation. Those enrolled in the course will participate in laboratory situations to tutor disabled readers. (To be taken following or concurrent with Ed. 340 or Ed. 346.)

Ed. 355 Mathematics: Diagnosis and Prescription **2 hours**

The study of methods for dealing with corrective and remedial situations in mathematics. Format will include diagnosis of specific problems and their origins as well as prescription for corrections and remediation. Those enrolled in the course will participate in laboratory situations to tutor students with problems in mathematics. (To be taken following or concurrent with Ed. 345.)

Ed. 401 History and Philosophy of Education **2 hours**

A study of the development of modern education in social, historical, and philosophical perspective, emphasizing backgrounds of present practices, current problems, and issues. Current practice is analyzed in terms of philosophic rationale and applications are made to the school situation.

Ed. 428 Principles and Techniques of Secondary Education **4 hours**

An examination of aims, functions, and curriculum organization of middle, junior high, and senior high schools. Basic strategies, materials, and techniques, including evaluation applicable to teaching, are integrated with a full semester of student teaching in schools. Certification and employment procedures, professional practices, and continuing education are also considered. *Prerequisite: Ed. 348.*

Ed. 440 Teaching Reading in the Content Areas **2 hours**

An introduction to diagnostic and prescriptive teaching techniques. Both the corrective techniques for the remedial reader and the higher order cognitive skills will be included. In addition to classwork this course includes two hours weekly of tutoring middle school, secondary, or college students who have been recommended by their advisors for help in reading. *Prerequisite: Ed. 348.*

Ed. 447 Methods and Content in Elementary and Middle Childhood III: Science **2 hours**

The study of the concepts of the sciences approached through various methods, including unit study, inquiry, experimentation, and the process approach. Practical application in school situation. *Prerequisite: Ed. 348.*

Ed. 448 Methods and Content in Elementary and Middle Childhood IV: Social Studies **2 hours**

The study of the concepts of social studies approached through various methods, including unit study, inquiry experimentation, and the process approach. Practical application in school situation. *Prerequisite: Ed. 348.*

Ed. 470 Observation and Directed Teaching **4 or 8 hours**

Directed full-semester or half-semester observation and student teaching in schools with partial assignments in appropriate grade levels; to include weekly student teaching seminars and a minimum of 150 clock hours actual teaching. Students must make applications for student teaching prior to advance registration. Other course or activities which might interfere with student teaching are not permitted. (Concurrent with enrollment in the Education Year. CR/NCR course.)

Ed. 475 Professional Internship **4 hours**

Participation in an adult training and/or educational program appropriate to the student's area of study and potential employment. Students will apply the skills and knowledge gained in previous courses.

Ed. 480 Methods and Materials in Teaching **2 or 4 hours**

See courses numbered 480 offered by Biology, Chemistry, English, Fine and Applied Arts, Foreign Languages, General Sciences, Mathematics, Physical Education, Physics, Psychology and Social Sciences.

Ed. 484 Methods of Teaching English as a Foreign Language **2 hours**

A directed study of techniques for teaching English vocabulary, spelling, and grammar to native speakers of other languages. Practical experience through tutoring.

Ed. 487-488 Independent Study

2 or 4 hours

Ed. 490 Senior Project

2-8 hours

Special Education

Sp. Ed. 205 Introduction to the Exceptional Learner

2 hours

A study of recent social, legal, and educational trends related to the handicapped student and of the characteristics and educational methods for various areas of exceptionalities. This course is designed to serve as an integral part of the preparation of teachers of Specific Learning Disability students and others who are involved with exceptional students educationally.

Sp. Ed. 206 Educating the Specific Learning Disabilities Student

4 hours

An introduction to the characteristics of the Specific Learning Disability (SLD) student and models of intervention, mainstreaming, and roles of resource room, consulting room, and teachers of self-contained classrooms. A field placement is required for this course. *Prerequisite: Sp. Ed. 205.*

Sp. Ed. 300-309 Issues in Special Education

2 or 4 hours each

Sp. Ed. 300 Teaching Exceptional Students in Mainstream Classes

2 hours

An introduction to the instruction of exceptional children within the mainstream. Characteristics of exceptional learners, instructional strategies, the responsibilities of classroom teachers in the referral process, and significant legislation and its implications are emphasized.

Sp. Ed. 310 Assessment and Evaluation for Learning Disabilities

2 hours

The study of a variety of assessment instruments for the purpose of educational evaluation, placement, diagnosis, and intervention. Students administer formal tests and develop informal tests as a means of acquiring skills with standardized, norm-referenced, criterion-referenced, diagnostic, and achievement tests to provide appropriate educational programs for the learning disabled student.

Sp. Ed. 320 Teaching Methods for Specific Learning Disabilities: Early and Middle Childhood

2 hours

A study of SLD methods for early and middle childhood that stresses intervention strategies for different levels of severity. This course is designed to instruct Specific Learning Disability (SLD) teachers in methods and models of intervention and synthesis of the diagnostic-prescriptive model. *Prerequisite: Sp. Ed. 206.*

Sp. Ed. 410 Tests and Measurements

2 hours

The study of variety of assessment instruments for the purpose of educational evaluation placement, diagnosis, and intervention. Students administer formal tests and develop informal tests as a means of acquiring skills with standardized, norm-referenced, criteria-referenced, diagnostic, and achievement tests to provide appropriate educational programs for the learning disabled student. *Prerequisite: Ed. 348.* (May be taken for credit as Psych. 410.)

Sp. Ed. 470 Observation and Directed Teaching: Specific Learning Disabilities

4 hours

A directed half-semester observation and student teaching in schools with partial assignments in appropriate specific learning disabilities placements, to include weekly student teaching seminars and a minimum of 150 clock hours actual teaching. Students must make application for student teaching prior to advance registration. Other course or activities which might interfere with student teaching are not permitted. Concurrent with enrollment in the Education Year and Education 470 (4 hours credit). Credit-No-Credit.

Sp. Ed. 475 Professional Internship

4 hours

Participation in an adult training and/or educational program appropriate to the student's area of study and potential employment. Students apply the skills and knowledge gained in previous courses.

English

Aims

To help students develop and maintain the ability to write clear and effective English; to guide them toward an increased understanding and critical appreciation of their literary heritage; to help prepare them for graduate and professional study. In addition, the department provides programs that prepare students for certification as teachers of English and Language Arts.

Requirements for Major

All students are required to take the following courses in the department:
Eng. 140 or 150; 325-326; 330; 341-342; 477; 490.

In addition each student must complete one of the following tracks:

English: Required are twelve additional credit-hours in specialized and/or advanced courses offered by the English Department; I.S. 251 and 252. Recommended is a minor related to the student's special interests or vocational plans.

English Education: Required are the following courses:

Eng. 210; FAA220; Eng. 289 or 290; Ed. 340; F.L. or Eng. 371; Eng. 372; Eng. 375; Ed. or Eng. 480; Ed. or Eng. 483; one course selected from the following: I.S. 251, I.S. 252, Eng. 266, Eng. 267, Eng. 268. To be recommended for certification, the student must also complete the courses in the Professional Education sequence described in the listing of the Education Department (Ed. 201 and the minor in Secondary Education). *The following English courses are prerequisite to student teaching: Eng. 375, 483, 480.*

A student majoring in English is expected to earn a minimum grade of C in all courses in the Department.

Students planning to attend graduate or professional schools should prepare to meet foreign language reading requirements.

Requirements for Minors

American Literature: Eng. 140 or 150, 341-342, eight additional credit-hours in English courses devoted to American writers with the following recommended: 263-264 and one 400-level seminar.

British Literature: Eng. 140 or 150, 325-326, eight additional credit-hours in English courses devoted to British writers with the following recommended: 261-262, 270, or 330 and one 400-level seminar.

Writing and Language: Eng. 140 or 150, 205, 209, 210, 371, 372, 375, a minimum of two additional credit-hours selected from the following: 213, 351, 484.

Writing Proficiency Program

The Writing Proficiency Program is administered by the English Department. Students should complete the program and meet the writing proficiency requirement for graduation before the beginning of the senior year.

Students must achieve and maintain an above-average level of proficiency in expository writing by taking the annual Writing Qualification Test or by satisfactory completion of selected writing courses offered by the English Department.

Students who choose to satisfy the requirement by enrolling in writing courses may do so by electing from the following: Eng. 100, 120, 125, 140, 150, 209, 210, 213, or 351. No more than one course per academic year will apply to the requirement. See below for the number of courses needed to satisfy the writing proficiency requirement.

The Department of English will certify to the Registrar that a student has satisfied the writing proficiency requirement for graduation when proficiency has been demonstrated in one of the following ways:

1. By achieving a high level of proficiency on both the first Writing Qualification Test, taken in October of the freshman year, and the second Writing Qualification Test, taken in March of the sophomore year. (A grade of C+ or better in an approved writing course is an alternative to the required high level of proficiency on either of these tests.) *A student whose proficiency is certified in this way is not required to take additional tests or courses.*
2. By taking the first Writing Qualification Test in November of the freshman year and achieving a high level of proficiency on the third test, taken in April of the junior year.
3. By achieving a grade of C+ or better in a writing course taken in the junior year.
4. By achieving a grade of B or better in any approved writing course taken either the freshman or sophomore year.

Students who have not met the writing proficiency requirement before the beginning of their seventh semester must enroll in Eng. 120, a non-credit, non-graded course in expository writing. Special Writing Qualification Tests are given as part of this course, and students must continue in the course until they have achieved a high level of proficiency on one of the special tests. Writing Qualification Tests are given to seniors only when enrolled in the course.

Special arrangements are made for students who transfer from other colleges. Transfer students should consult the Department of English immediately upon enrolling at Bethany.

Writing tests are given according to the following schedule:

October

Writing Qualification Test: Freshmen (Required)

March

Writing Qualification Test: Sophomores (Advisory) and Juniors (Required)

Eng. 100 College Composition

4 hours

A basic course for training and practice in the process of writing effective essays from the prewriting stage through final revision and polishing. Emphasis is on audience and purpose, point of view, organization, and style. Formal assignments encourage students to write the types of essays they are likely to encounter in other college courses, including documented reports.

Eng. 120 Expository Writing

Non-credit

An intensive course for training and practice in writing essays. (Required of all students who have not met the writing proficiency requirement before the beginning of their seventh semester. Not open to others.)

Eng. 125 Expository Writing Workshop **2 hours**

An intensive course for training and practice in writing clear and effective expository prose. After an initial diagnosis, an individual program is designed for each student. (Offered only during January Term as a substitute for Eng. 100 and an alternative to Eng. 120. May not be taken on a credit-no credit basis.)

Eng. 140 Introduction to Literature **4 hours**

An introduction to the study of poetry, drama, and fiction. Emphasis is on the development of techniques for the analysis and evaluation of poetry, drama, and fiction and on the writing of literary essays.

Eng. 150 Honors Freshman English **4 hours**

An introduction to the principles of critical reading and writing and to the analysis and evaluation of poetry, drama, and fiction. Intensive practice in expository and imaginative writing with emphasis upon the achievement of clarity and accuracy. A course for freshmen of superior ability and accomplishment. (May be substituted for Eng. 140 to fulfill requirement for concentration in English and prerequisites for English courses. Enrollment by invitation only.)

Eng. 160 Introduction to Film **4 hours**

An introduction to the study the film as a technical artifact, an art object, a mirror of society, and a moral statement. Students view twelve classic films such as Chaplin's *City Lights*, Resnais's *Hiroshima Mon Amour*, Bergman's *Virgin Spring*, and Hitchcock's *Psycho*. Fee. \$15.

Eng. 170 Introduction to Poetry **4 hours**

A study of poetic forms and techniques, with some consideration of the historical development of poetry in English. Emphasis is on developing the student's ability to read, understand, and evaluate poems.

Eng. 205 Writing for Business and Industry **2 hours**

An introduction to writing formal and informal reports, summaries, business letters, job descriptions, applications, and resumes. Each student completes approximately 10 writing assignments. *Prerequisite: Eng. 100 or demonstrated competence in expository writing.*

Eng. 209 Technical Writing **4 hours**

A workshop for training and practice in the written communication of specialized information to audiences with varying levels of knowledge. Emphasis is on the analysis of audiences and purposes, the selection and organization of information, the creation of informative graphics, and the manipulation of conventional formats to develop concise and effective instruction sets, descriptive analyses, abstracts, occurrence reports, literature reviews, feasibility studies, proposals, investigative reports, and other types of writing usually required of professionals. Students make use of the College's computer facilities for word processing and for generating graphs, charts, and lists.

Eng. 210 Creative Writing Workshop **2 hours**

An intensive workshop for training and practice in the creative aspects of expository and imaginative writing. Students write essays, sketches, short fiction, poems, and dramatic scenes. (Required for students preparing to teach secondary school English. Enrollment limited to 15 students with preference given to juniors and seniors. May be repeated once for additional credit.) *Prerequisite: Eng. 100 or the equivalent.*

Eng. 213 Advanced Expository Writing **2 hours**

An examination of and intensive practice in writing expository prose with emphasis upon the achievement of literary excellence. (Enrollment limited to 15 students with preference given to juniors and seniors.) *Prerequisite: Eng. 100 or the equivalent.*

Eng. 261-262 British Novel **2 hours each**

A study of the development of the British novel from the 18th century to the present. 261: Defoe through Dickens. 262: Hardy to the present.

Eng. 263-264 American Novel **2 hours each**

A study of the development of the American novel from the 19th century to the present. 263: Beginnings through World War I. 264: 1920s to the present.

- Eng. 266 Masterpieces of Western Literature** 4 hours
A study of major works from the Middle Ages through the nineteenth century. Such works as the following will be considered: Dante's *Divine Comedy*, Rabelais' *Gargantua and Pantagruel*, Cervantes' *Don Quixote*, Swift's *Gulliver's Travels*, Goethe's *Faust*, and Tolstoy's *Anna Karenina*.
- Eng. 267 Mythology** 2 hours
A study of Greek and Roman myths and their later use in Western art, literature, music, and science. Brief comparative study of Celtic and Germanic myths.
- Eng. 268 Modern World Literature** 4 hours
A study of the work of writers representing the diverse cultural traditions of the modern world. In addition to the works representing the western tradition, works will be studied representing such traditions as the Eastern European, the Middle Eastern, the African, the Latin American, and the Oriental.
- Eng. 270 Shakespeare** 4 hours
A rapid reading of the major plays with emphasis upon Shakespeare's themes, motifs, language, and characterization. (May be taken for credit as FAA 270.)
- Eng. 280-288 Colloquium in Literature** 2 or 4 hours each
A series of courses for the discussion of special topics in literature. (Enrollment in each course limited to 20 students.)
- Eng. 287 The Fiction of Southern Women** 2 hours
An analysis and evaluation of novels and short stories written by women authors from the southern United States, from Kate Chopin to Alice Walker. Emphasis is on both the literary and social aspects of the works studied.
- Eng. 289 Children's Literature** 2 hours
An examination of literature for children, including consideration of background and history, current works, skills for critical analysis, and approaches to using literature. Students enrolled in the course work with children.
- Eng. 290 Literature and Adolescence** 2 hours
The examination of important works about or of special interest to young people of junior high school through high school age. Techniques of presenting the works are considered. Readings are primarily in short stories and novels.
- Eng. 325-326 British Literature** 4 hours each
An analysis of the development of British literature from the beginning through the Victorian Period. First semester: from *Beowulf* through Milton. Second semester: from the Restoration to the end of the 19th century. *Prerequisite: Eng. 140 or permission of the instructor.*
- Eng. 330 Twentieth-Century British Literature** 4 hours
A study of important works of British fiction and drama during this century. Writers included: Eliot, Yeats, Woolf, Joyce, Beckett, and Pinter. *Prerequisite: Eng. 140.*
- Eng. 341-342 American Literature** 4 hours each
An examination of the development of American literature from the Colonial Period to the present with emphasis upon the writers of the 19th and 20th centuries. *Prerequisite: Eng. 140 or permission of the instructor.*
- Eng. 351 Literary Criticism** 4 hours
A study of the history of literary criticism, literary theory, and applied approaches to literary criticism. Special emphasis is on the preparation of essays which apply various theories and demonstrate various critical points of view.
- Eng. 371 Introduction to Linguistics** 2 hours
A study of basic concepts and terminology of linguistics. (May be taken for credit as F.L. 371.)
- Eng. 372 Development of Modern English** 2 hours
An introduction to the history of the English Language from its Anglo-Saxon beginnings to the present. *Prerequisite: Eng. 371 or F.L. 371.*

Eng. 375 English Grammar **2 hours**

The description and analysis of the grammar of the English language. Various grammatical systems are considered, such as the traditional, the structural, and the transformational-generative.

Eng. 420-429 Seminar in Major Authors **2 or 4 hours each**

The advanced study of one or more major British, American, or European authors. (Enrollment in each course limited to 12 students. Topics change regularly.) *Prerequisite: previous study of the author or authors in a survey course.*

Eng. 421 Hemingway **2 hours**

A study of selected fiction by Ernest Hemingway. Emphasis will be on the Nick Adams stories, *A Farewell to Arms*, and *The Old Man and the Sea*.

Eng. 423 Johnson and Boswell **4 hours**

A study of the life and selected works of Samuel Johnson and of James Boswell as journalist and biographer.

Eng. 440-449 Seminar in British Literature **2 or 4 hours each**

The advanced study of a period, movement, or tradition in British literature. (Enrollment in each course limited to 12 students. Topics change regularly.) *Prerequisite: previous study of the period, movement, or tradition in a survey course.*

Eng. 442 Renaissance Literature and Christian Epic **4 hours**

A study of the development of Christian epic from Tasso to Spenser and Milton. Emphasis on the use of allegory and the structure of the heroic poem. *Prerequisite: Eng. 325; I.S. 252.*

Eng. 444 Age of Johnson **4 hours**

A study of the major prose, poetry, and drama of the mid-eighteenth century with emphasis upon the work of Samuel Johnson and the members of his circle, including Boswell, Goldsmith, and others.

Eng. 445 Victorian Writers **4 hours**

The investigation of major poems by Tennyson (*In Memoriam* and *Idylls of the King*) and Browning (*The Ring and the Book*), poems and criticism by Matthew Arnold, and novels by Dickens, Thackeray, and George Eliot.

Eng. 450-459 Seminar in American Literature **2 or 4 hours each**

The advanced study of a period, movement, or tradition in American literature. (Enrollment in each course limited to 12 students. Topics change regularly.) *Prerequisite: previous study of the period, movement, or tradition in a survey course.*

Eng. 450 Recent American Literature **4 hours**

A study of American poetry, drama, and fiction since World War II. Emphasis is on the analysis of works representing the various ideas, techniques, styles, and movements characterizing the writing of the last forty-five years.

Eng. 451 Short Fiction in the Romantic Period **2 hours**

A study of tales, fictional sketches, short stories, and novellas written in the United States from the early nineteenth century to the Civil War. Emphasis is on the development of short fiction during the period and on the analysis and evaluation of particular works. Writings by such authors as Poe, Irving, Hawthorne, and Melville are considered.

Eng. 456 The 1920's **4 hours**

A study of the poetry, drama, fiction, and critical writings of the 1920's. Emphasis is on such major writers as Pound, Eliot, Fitzgerald, Hemingway, Faulkner, and O'Neill; but other important writers are also studied.

Eng. 457 Hawthorne, James, and Faulkner **4 hours**

A study of critical and fictional works of Hawthorne, James, and Faulkner. Emphasis is on ideas, themes, and techniques.

Eng. 477 English Seminar**2 hours**

The undertaking of reading and research designed to help students review and organize their knowledge of literature. *Prerequisites: Eng. 140 or 150, 325-326, 330, 341-342 or permission of the instructor.*

Eng. 480 Methods of Teaching English**2 hours**

The exploration of materials and methods of teaching of high school composition and literature. Literary analysis, systems of grammar, and reading improvement are examined. (May be taken for credit as Ed. 480.)

Eng. 483 Theory and Practice of Teaching Composition**2 hours**

An examination of historical and current theories of composition as a conceptual background for both teaching and writing. Students will study research and theory on the writing process. Students will practice both writing and teaching writing.

Eng. 484 Methods of Teaching English as a Foreign Language**2 hours**

A directed study of techniques for teaching English vocabulary, spelling, and grammar to native speakers of other languages. Practical experience through tutoring. (May be taken for credit as Ed. 484.) *Offered upon request.*

Eng. 487-488 Independent Study**2 or 4 hours**

Individual study in any area of English for which the student is qualified. Independent study is offered only in areas not included in other courses in the department. *Prerequisite: Adequate preparation to undertake the study as determined by the instructor.*

Eng. 490 Senior Project**2-8 hours**

Generally consists of a major critical paper on a topic developed from at least one of the student's elective courses in the department. During the junior year, the student should determine an area of interest and make a preliminary investigation of it after consulting with his or her mentor (the faculty member best qualified to assist in the project). Reading and research should continue during the student's senior year, and much of the final semester should be devoted to preparation of the paper. Sometimes the project may take other forms. Students wishing to undertake an unusual project must consult with the head of the department no later than the beginning of the fourth semester. Credit for the senior project is not included in the total number of hours required for concentration in English

Fine and Applied Arts

Aims

The Fine and Applied Arts Department provides study in the visual arts, theatre, graphics design, and music. The purpose of the department is to give expression to the historical and aesthetic unity of the various forms and modes of fine arts and, at the same time, to permit students to pursue application in the arts.

Requirements for Major

Students majoring in Fine and Applied Arts must take FAA 101, 102, 103, 477, and 490. Related requirements are I.S. 251, 252. In addition, the completion of one of the following departmental emphases is required: 1) Two-Dimensional Art — FAA 200, 201, 203, 211, 212, 311, 312; 2) Three-Dimensional Art — FAA 200, 201, 211 or 212, 213, 310, 313; 3) Design — FAA 200, 205, 214, 215, 314, 315, 316; or 4) Theatre — FAA 151, 152, 153, 220, 230, 270, 320, 420, and Eng. 210.

Requirements for Minors

Studio Art: FAA 101, 200, 203, 211, 212.

Theatre: FAA 103, 151 or 152, 153, 220, 225, 230, 235, 320, 420.

FAA 101 Introduction to Art	4 hours
An historical and aesthetic study of the visual arts from the ancient world to the present. Representative masterworks of art are studied, and consideration is given to aesthetic functions and values.	
FAA 102 Introduction to Music	4 hours
An historical and aesthetic study of music from Gregorian Chant to the present. Representative masterworks of music are studied, and consideration is given to aesthetic functions and values.	
FAA 103 Dramatic Literature and Theatre Development	4 hours
A survey of drama and theatre architecture and design with emphasis on both primary and secondary literature in both historical and aesthetic context.	
FAA 105-106 College Choir	1 hour each
Preparation for performance of choral music. (Activity course: CR/NCR only.) <i>Enrollment by audition.</i>	
FAA 107-108 Instrumental Ensemble	1 hour each
Preparation for performance of standard ensemble literature according to instrumentalists available. (Activity course: CR/NCR only.) <i>Enrollment by audition.</i>	
FAA 109-110 Jazz-Rock Ensemble	1 hour each
Preparation for performance of contemporary jazz and rock arrangements. (Activity course: CR/NCR only.) <i>Enrollment by audition.</i>	
FAA 111-112 Piano	1 hour each
Private instruction in the techniques, theory, and literature of the piano. (Activity course: CR/NCR only.) <i>Enrollment by permission of the instructor.</i>	
FAA 113-114 Strings	1 hour each
Private instruction in the techniques, theory, and literature of violin, viola, cello, or bass. (Activity course: CR/NCR only.) <i>Enrollment by permission of the instructor.</i>	
FAA 115-116 Winds	1 hour each
Private instruction in the techniques, theory, and literature of the brass and woodwind instruments. (Activity course: CR/NCR only.) <i>Enrollment by permission of the instructor.</i>	
FAA 117-118 Voice	1 hour each
Private instruction in the technique, theory, and literature of voice. (Activity course: CR/NCR only.) <i>Enrollment by permission of the instructor.</i>	
FAA 120 Music as Art and Science	2 hours
This course provides an aural study of classical and popular music within an aesthetic perspective. It surveys music within various genres and does not presuppose any previous musical background. (Required of all students concentrating in Elementary Education.)	
FAA 125 Art Activities in the Elementary Schools	4 hours
A study of the theories and goals of art education in the elementary school with emphasis on the child's growth and development through art. Exploration of art techniques is included.	
FAA 151 Fundamentals of Stage Construction	2 hours
FAA 152 Theatre Lighting	2 hours
FAA 153 Theatre Make-up	2 hours
FAA 154 Costuming	2 hours
FAA 155 Scene Painting	2 hours
FAA 200 Introduction to Two-Dimensional Design	4 hours
An introduction to the theories and practice of two-dimensional design; study of the elements and materials in relation to design potentials with practical applications.	
FAA 201 Introduction to Three-Dimensional Design	4 hours
An introduction to the theory and practice of three-dimensional design. Consideration is given to the relation between the design potential of various materials and their practical applications.	

- FAA 203 Printmaking** **4 hours**
The study of printmaking processes emphasizing creative expression through such techniques as relief, intaglio, planography, and serigraphy.
- FAA 205 Airbrush Techniques** **2 hours**
The course covers beginning through advanced airbrush techniques. Exploration of various hues, graphic design, photo retouching, ceramics, and painting.
- FAA 206 Interpersonal Communication: Public Speaking** **4 hours**
An introduction to the dynamics of communication: levels of interaction between speaker and listener; developing the use of voice and non-verbal signals; understanding oral style in language and logical argument in public speaking; focus on the design and delivery of short speeches and on critical listening. (May be taken for credit as Comm. 206.)
- FAA 210 Ceramics I** **4 hours**
A concentrated study of the history and various techniques of ceramic art, including studio experience in forming, firing, and glazing pottery and ceramic sculpture.
- FAA 211 Drawing I** **4 hours**
A concentrated study of the aesthetics and techniques of drawing, including studio experience in such fundamentals as proportion, perspective, and value.
- FAA 212 Painting I** **4 hours**
A concentrated study of the aesthetics and techniques of painting, including studio experience in the fundamentals of composition, color, style, and materials.
- FAA 213 Sculpture I** **2 hours**
The course emphasizes creative expression in three-dimensional forms. Students work with materials that are readily available and easily handled such as wood, wire, plaster, and clay. *Prerequisite: FAA 201 or permission of the instructor.*
- FAA 214 Lettering and Layout** **4 hours**
An introduction to calligraphy, typography, letter forms, and layout, with emphasis on design, legibility, and creative practice.
- FAA 215 Design Application** **4 hours**
This course emphasizes problem solving experiences as related to visual communications. The mechanics and psychology of two-dimensional and three-dimensional design are explored as a foundation for graphic design.
- FAA 220 Beginning Acting** **2 hours**
A study of movements, various styles, improvisations, projections of character, and speech technique. The course includes a 10-20 minute planned and rehearsed program that demonstrates skills acquired in improvisation and body and voice techniques.
- FAA 225 Dance for Non-Dancers** **2 hours**
The development of beginning dance skills with emphasis upon improvisational dance modes and creative body language.
- FAA 230 Children's Theatre** **2 hours**
The development of techniques required in writing for and performing before children.
- FAA 235 Musical Comedy** **2 hours**
A study of musical comedy scores and libretti, basic principles of musical comedy singing, dancing, and acting, and other fundamentals of the genre.
- FAA 270 Shakespeare** **4 hours**
A rapid reading of the major plays with emphasis upon Shakespeare's themes, motifs, language, and characterization. (May be taken for credit as Eng. 270.)
- FAA 310 Ceramics II** **2 hours**
A study of problems in media and subject matter selected by the student with the advice of the instructor. *Prerequisite: FAA 210.*
- FAA 311 Drawing II** **2 hours**
The course provides advanced studio experience in drawing. *Prerequisite: FAA 211.*

- FAA 312 Painting II** **2 hours**
The course provides advanced studio experience in painting. *Prerequisite: FAA 212.*
- FAA 313 Sculpture II** **2 hours**
A study of problems in media and subject matter selected by the student with the advice of the instructor. *Prerequisite: FAA 213.*
- FAA 314 Computer Graphics and Applied Design** **4 hours**
An examination of practical applications of graphics and communication design techniques as related to the computer and other technological aids. *Prerequisites: FAA 214 and 215.*
- FAA 315 Television Graphics** **4 hours**
The course emphasizes design of visual symbols for television. Combines principles of graphic art with the particular requirements of television production. *Prerequisite: FAA 314.*
- FAA 316 Graphics Design Practice** **4 hours**
A study of professional procedures, structures, communication functions, and processes as applied to areas of graphic design. *Prerequisites: FAA 214 and 215.*
- FAA 320 Advanced Acting** **2 hours**
The course emphasizes scene study as a unit of theatrical form. Scenes from various periods to be directed and performed. Focus on interaction between characters. *Prerequisite: FAA 220.*
- FAA 399 Fine Arts Management** **2 hours**
The study of management principles and practices as applied to agencies and institutions in the various fields of the arts, such as museums, galleries, symphonies, theatres, and others.
- FAA 416 Opera** **2 hours**
This course is designed to introduce the general student to operatic techniques and conventions. The principal emphasis will be on the ways in which music enhances dramatic elements in operas of Mozart and Verdi. No technical knowledge of music is required.
- FAA 420 Directing** **2 hours**
A study of the fundamentals of staging, blocking, movement, stage business, tempo, script analysis, casting, and rehearsal planning. The course includes preparation of a prompt book for a one-act play to be directed for public performance. *Prerequisite: FAA 220.*
- FAA 477 Senior Seminar** **2 hours**
This course is a review of the fine arts area concentrating upon the student's area of emphasis.
- FAA 481 Methods and Materials in Teaching Elementary School Music** **2 hours**
The aims and values of elementary school music will be studied, opportunities to develop teaching techniques will be provided, and introductions to standard materials will be made. (Required of all students concentrating in Elementary Education.)
- FAA 487-488 Independent Study** **2-4 hours**
- FAA 490 Senior Project** **2-8 hours**
Recommended to begin during the second semester of the junior year.

Foreign Languages

Aims

To familiarize students with the language and literature of the French, German, and Spanish speaking peoples; to help students understand a culture other than their own; and to assist students in preparing for careers requiring foreign language skills. The program also provides students interested in research with a reading knowledge of a foreign language, and it helps travelers to foreign countries acquire basic conversation skills.

Requirements for Major in French, German, or Spanish

A minimum of 28 hours in the target language (not including Fr. 110, 120, 230; Ger. 110, 120, 230; or Span. 110, 120, 230) plus F.L. 371 or Eng. 371, and a Senior Project. Required are at least one conversation course (240 or 241), one literature course (351, 352, 357, or 358), and one civilization course (310, 311, 312 or 313). Related course requirements are I.S. 251 and 252. All students are expected to spend a minimum of one semester studying in a country where their target language is spoken. Students planning to teach a foreign language must complete F.L. 480 and 481.

Foreign Language majors should consider developing a strong second field in an area related to career goals and acquiring a working knowledge of an additional foreign language.

Requirements for Minors

For each of the minors in Foreign Languages, 16 hours above the 230 level (third semester) are required.

French: Fr. 240, 241, 313, either 351 or 352. (*Study abroad may replace either Fr. 240 or 241.*)

German: Ger. 240, 241, 312, either 351 or 352. (*Study abroad may replace either Ger. 240 or 241.*)

Spanish: Span. 240, 241, 310 or 311, 357 or 358. (*Study abroad may replace either Span. 240 or 241.*)

Requirements for Teaching Certification

French: Only French majors who have completed the following courses will be recommended for state certification to teach French in the secondary schools: Fr. 110, 120, 230, 240 or 241, 313, 351 or 352, 4 additional semester hours in French courses; F.L. or Eng. 371; F.L. 480, 481; the courses in the professional education sequence described in the listing of the Education Department (Ed. 201 and the minor in Secondary Education). *The following are prerequisite to student teaching: F.L. 480, 481; approved study abroad within a French-speaking culture or a minimum level of Intermediate High in the ACTFL/ETS Oral Proficiency Interview.*

German: Only German majors who have completed the following courses will be recommended for state certification to teach German in the secondary schools: Ger. 110, 120, 230, 240 or 241, 312, 351 or 352, 4 additional semester hours in German courses; F.L. or Eng. 371; F.L. 480, 481; the courses in the professional education sequence

described in the listing of the Education Department (Ed. 201 and the minor in Secondary Education). *The following are prerequisite to student teaching: F.L. 480, 481; approved study abroad within a German-speaking culture or a minimum level of Intermediate High in the ACTFL/ETS Oral Proficiency Interview.*

Spanish: Only Spanish majors who have completed the following courses will be recommended for state certification to teach Spanish in the secondary schools: Span.. 110, 120, 230, 240 or 241 310, 357 or 358, 4 additional semester hours in Spanish courses; F.L. or Eng. 371; F.L. 480, 481; the courses in the professional education sequence described in the listing of the Education Department (Ed. 201 and the minor in Secondary Education). *The following are prerequisite to student teaching: F.L. 480, 481; approved study abroad within a Spanish speaking culture or a minimum level of Intermediate High in the ACTFL/ETS Oral Proficiency Interview.*

French

Fr. 110 French I **4 hours**

This is the first of three courses emphasizing the acquisition of French language skills needed to satisfy basic social requirements in French-speaking countries. Elementary listening, speaking, reading, and writing needs are addressed, as well as an introduction to French cultures and issues. (Oral practice sessions are required. French I is intended primarily for students who have no acquaintance with the language.)

Fr. 120 French II **4 hours**

The second of three courses: See Fr. 110. *Prerequisite: Fr. 110 or equivalent.*

Fr. 230 French III **4 hours**

The third of three courses: See Fr. 110. *Prerequisite: Fr. 120 or equivalent.*

Fr. 240 Conversation and Composition: The Living Language **4 hours**

French and American life styles are compared through discussions and compositions designed to improve the student's communication skills in French. *Prerequisite: Fr. 230 or equivalent.*

Fr. 241 Conversation and Composition: Francophone World **4 hours**

While improving skills of spoken and written communications in French, the student becomes acquainted with contemporary issues in the French-speaking world. *Prerequisite: Fr. 230 or equivalent.*

Fr. 313 France **4 hours**

An introduction to France, with special attention to its political and cultural history, contemporary institutions, activities, customs, and values. Cross-cultural comparisons and contrasts of France and the United States are included.

Fr. 351 Survey of French Literature I **4 hours**

A survey of French literature from the earliest periods to the end of the 18th century. Readings in French from an anthology and certain reference works. Conducted in French. *Prerequisite: Fr. 240, 241 or equivalent.*

Fr. 352 Survey of French Literature II **4 hours**

A survey of French literature of the 19th and 20th centuries. Introduction to *explication de texte* techniques. Readings in French from an anthology and certain reference works. Conducted in French. *Prerequisite: Fr. 240, 241 or equivalent.*

Fr. 410 Topics in French Literature **2 or 4 hours**

An advanced literature seminar which highlights major literary movements, genres, and themes from the French-speaking world. *Prerequisite: Fr. 351 or 352 or permission of instructor.*

Fr. 487-488 Independent Study **2 or 4 hours**

Fr. 490 Senior Project **2-8 hours**

German

- Ger. 110 German I** 4 hours
This is the first of three courses emphasizing the acquisition of German language skills needed to satisfy basic social requirements in the German-speaking countries. Elementary listening, speaking, reading, and writing needs are addressed, as well as an introduction to German culture and issues. (Oral practice sessions are required. German I is intended primarily for students who have no acquaintance with the language.)
- Ger. 120 German II** 4 hours
The second of three courses: See Ger. 110. *Prerequisite: Ger. 110 or equivalent.*
- Ger. 230 German III** 4 hours
The third of three courses: See Ger. 110. *Prerequisite: Ger. 120 or equivalent.*
- Ger. 240 Conversation and Composition I** 4 hours
A discussion of life in Germany. Designed to improve communication skills. Brief oral and written reports. *Prerequisite: Ger. 230 or equivalent.*
- Ger. 241 Conversation and Composition II** 4 hours
The course is designed to improve skills of spoken and written communication in German through a focus on contemporary problems. *Prerequisite: Ger. 230 or equivalent.*
- Ger. 302 German Business Correspondence** 2 hours
The course is designed to prepare students for possible employment in German-American firms through the development of skills in business letter writing and familiarization with German technical terms in business and banking. *Prerequisite: Ger. 230 or equivalent.*
- Ger. 312 German Civilization** 4 hours
The course is designed to acquaint the student with the history, culture, and people of the German speaking countries.
- Ger. 351 Survey of German Literature I** 4 hours
A survey of German literature from the earliest periods to the beginning of the 19th century. Readings in German from an anthology. Conducted in German. *Prerequisite: Ger. 240, 241 or equivalent.*
- Ger. 352 Survey of German literature II** 4 hours
A survey of German Literature from the Romantic period to the present. Readings in German from an anthology. Conducted in German. *Prerequisite: Ger. 240, 241 or equivalent.*
- Ger. 410 Topics in German Literature** 2 or 4 hours
An advanced literature seminar which highlights major literary movements, genres, and themes from the German-speaking world. *Prerequisite: Ger. 351 or 352 or permission of instructor.*
- Ger. 487-488 Independent Study** 2 or 4 hours
- Ger. 490 Senior Project** 2-8 hours

Spanish

- Span. 110 Spanish I** 4 hours
This is the first of three courses emphasizing the acquisition of Spanish language skills needed to satisfy basic social requirements in Spanish-speaking countries. Elementary listening, speaking, reading, and writing needs are addressed, as well as an introduction to Hispanic cultures and issues. (Oral practice sessions are required. Spanish I is intended primarily for students who have no acquaintance with the language.)
- Span. 120 Spanish II** 4 hours
The second of three courses: See Span. 110. *Prerequisite: Span. 110 or equivalent.*
- Span. 230 Spanish III** 4 hours
The third of three courses: See Span. 120. *Prerequisite: Span. 110 or equivalent.*
- Span. 240 Conversation and Composition: Spain** 4 hours
An intensive training in spoken and written Spanish with emphasis on current events in Spain. Oral reports are based on readings from newspapers, magazines, and literary works. *Prerequisite: Span. 230 or equivalent.*

Span. 241	Conversation and Composition: Spanish America	4 hours
An intensive training in spoken and written Spanish with emphasis on current events in Latin America. Oral reports are based on readings from newspapers, magazines, and literary works. <i>Prerequisite: Span. 230 or equivalent.</i>		
Span. 310	Spanish American Civilization	4 hours
A study of the development of Latin America from the pre-Columbian era to the present day in art, music, drama, history, and literature. Each student does research on a specific project selected in consultation with the instructor. Conducted in English.		
Span. 311	Spanish Civilization	4 hours
An examination of Spain's influence on the history, art, music, drama, literature, and science of the world. Each student does research on a specific project selected in consultation with the instructor. Conducted in English.		
Span. 357	Literature of the Hispanic World I	4 hours
An introduction to artistic, historical, and cultural aspects of the Spanish-speaking world through its literature. Literary genres, figures, and other aesthetic elements are examined. Conducted in Spanish. <i>Prerequisite: Span. 240, 241 or equivalent.</i>		
Span. 358	Literature of the Hispanic World II	4 hours
A study of the artistic, historical, and cultural aspects of the Spanish-speaking world through its literature. Literary genres, figures, and other aesthetic elements are examined. Conducted in Spanish. <i>Prerequisite: Span. 240, 241 or equivalent.</i>		
Span. 410	Topics in Spanish and Spanish American Literature	2 or 4 hours
An advanced literature seminar which highlights major literary movements, genres, and themes from the Spanish-speaking world. <i>Prerequisite: Span. 357 or 358 or permission of instructor.</i>		
Span. 487-88	Independent Study	2 or 4 hours
Span. 490	Senior Project	2-8 hours

Japanese

Jpnse. 110	Japanese I	4 hours
This is the first of two courses introducing the Japanese language and highlighting basic speaking and comprehension skills. Cultural issues also are presented. (Oral practice sessions are required.)		
Jpnse. 120	Japanese II	4 hours
The second of two courses. See Jpnse 110. <i>Prerequisite: Jpnse. 110 or equivalent.</i>		

Foreign Language

F.L. 371	Introduction to Linguistics	2 hours
A study of basic concepts and terminology of linguistics. Required of all majors in the department. (May be taken for credit as Eng. 371.)		
F.L. 480	Methods and Materials in Teaching Foreign Languages	2 hours
A study of the methods, teaching materials, lesson planning, and extracurricular activities necessary for the teacher of French, German, or Spanish as a foreign language. (May be taken for credit as Ed. 480.)		
F.L. 481	Foreign Languages for Middle Childhood	2 hours
Methods, teaching materials, lesson planning, and extracurricular activities necessary for the middle childhood teacher of French, German, or Spanish as a foreign language. Special emphasis on aural-oral teaching techniques and characteristics of the transescent language learner.		
F.L. 487-488	Independent Study in Foreign Languages	2 or 4 hours

Freshman Seminar

Fr. Sem. 111

4 hours

An examination of specialized topics in a seminar setting. Emphasis is given to the development of writing and critical thinking skills, practice in individual and group research, and application of oral communication skills. Attention is also given to orientation to the Bethany program, college life, and academic advising. Required of entering Freshmen in the fall semester.

Sec. A Sensitivity to the Natural World

This seminar is an introduction to the natural world based upon the observations of plants and animals in their natural settings. Most sessions will be held outdoors at Bethany and nearby natural sites.

Sec. B Science and Pseudoscience: The Need for Skeptical Inquiry

Surveys of American youth have shown a wide-spread belief in the pseudosciences such as astrology, numerology, biorhythms, clairvoyance, ESP, reincarnation, UFOs, and fringe medicine. Thus, there is need for a structured look at various pseudosciences and how each fails the test for being scientifically valid. The role that pseudoscience has played in the history of science will be considered. The limitations of science, even in our modern society, will be examined and debated.

Sec. C Where Am I Going?

In the quest for a sense of direction in life, the development of the interior life, and the integration of the mind and the heart, the spirituality of the Christian tradition offers a paradigm. Students will examine the spiritual writings of some of the Christian mystics as well as contemporary spiritual writings.

Sec. D Entrepreneurial Spirit

This seminar will study the entrepreneurial spirit in America. The dimensions of the entrepreneurial spirit will be explored through various readings. There will be visits and interviews with local entrepreneurs. Self-administered tests will be used to determine the degree to which individual students subscribe to the entrepreneurial spirit. The major focus of the course will be a simulation in which teams of students start their own businesses. Finally, students will explore opportunities for enterprise while at college.

Sec. E The Human Struggle Through Sport

This seminar explores the impact of sport on society and self. Students examine the social and psychological effects on participants in and consumers of sport through the study of fiction, essays, critical analysis, poetry, and film. Topics include amateurism, competition, aging, professionalism, racism, sexism, the role and impact of the media, sport and education, and the effect of sport on children.

Sec. F Reading and Writing Tests: Critical Interpretations of Print, Film and Television

This seminar will help students acquire the skills needed for active, critical interpretation of books, film, and television. Students will study reading strategy and theory as they write interpretations of academic texts, philosophical texts, a novel, a film, and television shows.

Sec. G. Rock 'n' Roll and the American Dream

Rock 'n' Roll music has played a major role in forming and shaping youth culture in America. In examining rock 'n' roll, this seminar has three primary objectives: to gain a better understanding of the history and development of rock music in America; to gain a better understanding of the relationship of rock music and culture; and to gain a better understanding and appreciation of rock music itself.

Sec. H 'Toons and the Times: Cartoon, Comics, and American Culture

From Benjamin Franklin's "Join or Die" to today's "Calvin and Hobbes", cartoons have partly reflected and partly shaped the way the average person views the country. Political events and changing societal mores are chronicled in newspaper, magazine, and film cartoons. This seminar will examine various stages of this country's development through the eyes of its cartoonists.

Sec. I The Superpowers in the Nuclear Age

The seminar explores two basic themes, interrelated and converging: the origins, development, conduct, and results of the Cold War; and the development of nuclear weapons and their impact on superpower diplomacy.

Sec. J Around the World in 15 Weeks

This seminar will provide students with a general understanding of the ways human social life is patterned in various parts of the world. Students will have an intellectual journey to the continents, exploring some essential social organizations that have shaped human social life. Students will examine cultural activities in these areas and discuss the meaning of those events in their societal contexts.

Sec. K The Storytelling Tradition

Storytelling types, tales, and techniques will be explored in this seminar through readings, discussions, videos, a field trip to a national storytelling festival, and by personal experience in telling. A special fee is assessed to cover the cost of the field trip, approximately \$150.

Sec. L Far Away Places

This seminar is designed to bring together students from North America and other continents to focus on each other's cultures. Students from different geographic and cultural backgrounds will team up to explore cultural differences and similarities through discussions, presentations, personal experiences, and papers.

Sec. M On the Road

The "road" is often used as a key symbol for understanding life, society, and the human condition. This seminar will examine the meaning of the road in a number of different contexts. Topics include the road and rootlessness, tourism, travel and adventure, pilgrimage and self-discovery, dead ends, highwaymen, main streets, and the course of life.

Sec. N Ideas of Power

This seminar will include close readings of essays and fiction that focus on the consequences of having, or not having, power. Areas of discussion will include civil rights, sexual politics, and parent-child relationships.

Sec. O Education of the Self

An exploration of three areas considered crucial to personal adjustment and growth: the self-concept, relationships and communication, and a meaningful philosophy of life. Through readings and group discussions, students develop a greater understanding and acceptance of self and others. Students selecting this seminar should be interested in and open to personal growth and should be willing to share their thoughts and feelings about significant topics with the class.

General Sciences

General Sciences is a grouping of courses only. It is not a department and does not offer a major. It provides a number of courses, many of which are interdisciplinary in nature, designed primarily for non-science majors. Some of the courses, however, such as *History and Philosophy of Science* and *Science, Technology, and Society*, supplement the programs of science majors. In addition, special courses are offered for those interested in teaching science in public and private schools.

Only students who have completed the following courses or their equivalents will be recommended for state certification to teach General Science in middle and junior high schools: Bio. 100; Chem. 100 or 101; C.S. 482; Ed. 447; G.S. 201, 202; Phys. 103 or 201; the professional education sequence described in the listings for the Education Department.

G.S. 100 Consumer Chemistry **4 hours**

A course emphasizing an understanding of chemical concepts relevant to our everyday lives. At the end of this course, a student should be able to analyze and discuss magazine and newspaper articles dealing with the subjects related to chemistry. (This course is designed for non-science students. May be taken for credit as Chem. 100.)

G.S. 101 Natural Philosophy **4 hours**

An examination of man's changing ideas about the universe. Emphasis is placed upon the role of science as a social institution contributing to these changing beliefs.

G.S. 201 Astronomy **4 hours**

A non-technical course in descriptive astronomy and cosmology, including such topics as the solar system, stars, galactic systems, telescoping, rocketry, and space travel.

G.S. 202 Physical and Cultural Geography **4 hours**

A study of the interactions between environments and human activities over the earth's surface: land, sea and air. A complementary aspect of the course is devoted to place-name geography.

G.S. 209 History and Philosophy of Science **4 hours**

A study of some of the major ideas conceived by western man in attempting to comprehend and describe the natural world. (May be taken for credit as Phil. 353.) *Prerequisite: One year of college level science or permission of the instructor.*

G.S. 210 Science, Technology, and Society **4 hours**

An historical examination of the effects of scientific and technological innovations upon various societies, emphasis being placed upon technology and science of the western world since 1850.

G.S. 480 Methods and Materials in Teaching Physical and Life Sciences **4 hours**

A study of the aims and methods of teaching the physical and life sciences in the secondary schools. Special attention is given to teaching general laboratory procedures and techniques of teaching. Each of the departments in the physical and life sciences participates in the program. *Prerequisite: 16 hours in one of the physical or life sciences or permission of the instructor.*

G.S. 487-488 Independent Study **2 or 4 hours each**

Health Science

Aims

The curriculum in Health Science is interdepartmental, providing the opportunity to earn a Bachelor of Science degree for students who have completed accredited allied health certification programs at other institutions.

In addition to the all-college graduation requirements, students in Health Science may choose among three specializations: Science, Management, and Education. These programs are designed to prepare allied health professionals for graduate or professional school, career changes within allied health fields, or management or educational positions in health professions agencies.

Requirements for Major

Students admitted to this degree program must have completed an accredited allied health certification in areas such as respiratory therapy, radiology, or a comparable field.

In the *Science* area of specialization, students must complete 44 hours of selected science courses, plus a Senior Project. These courses will include Chem. 101, 102, 211, and 212; Phy. 201 and 202; Math. 281; and 16 hours chosen from Bio. 100, 167, 180, 343, 440, and 467.

In the *Management* area of specialization, students must complete 42 hours of selected courses, plus a Senior Project. These courses will include Acct. 211 and 212; Econ. 111, 200, 280, 286, 287, and 290; C.S. 140 or 144; Math. 281 and 282; and Comm. 302.

In the *Education* area of specialization, students must complete 40 hours of selected courses, plus a Senior Project. These courses will include Ed. 201, 202, 349, 410, 428, and 470, as well as Ed. 311, 312 and 476. In addition, students will complete Psych. 100, Soc. 100, and S.W. 310.

For course descriptions, see the listings in the respective departments. Further details of the program may be obtained from the Advisor for Health Science or the Office of the Dean of the Faculty.

History

Aims

To present the origin and development of institutions and ideas; to point out the great traditions that are molding our thought and action today; and to gain a better perspective of our political, economic, cultural, and social life.

Requirements for Major

Twelve hours in European history, including History 301-302, 12 hours of American history, including History 201-202. Four hours in political science, four hours in either African or Asian or Latin American history, History 477, and a Senior Project. A related requirement is I.S. 251 or 252, the other being strongly recommended. Students planning to attend graduate or professional schools should anticipate possible requirements in the areas of foreign language, statistics, accounting, and computer technology.

Requirements for Minor

Hist. 101, 102, 201, 202, plus four hours from 300 or 400-level offerings.

Requirements for Teaching Certification

Only History majors who have completed the following courses will be recommended for state certification to teach Social Studies in the secondary schools: Hist. 101, 201, 202, 225; Soc. 100; Econ. 200; G.S. 202 or Soc. Sci. 302; Pol. 225; I.S. 100; R.S. 100; Soc. Sci. 480; the requirements for certification for Social Studies Middle Childhood Education 5-8; the courses in the professional education sequence described in the listing of the Education Department (Ed. 201 and the minor in Secondary Education). *Soc. Sci. 480 is prerequisite to student teaching.*

European and World History

Hist. 101-102 World Civilizations I & II

4 hours each

A survey of world civilizations and the interactions between the different centers of civilization from the ancient world to the present. Particular emphasis is given to non-Western cultures in Asia, Africa, and the Americas. First semester covers the period from the ancient world to about 1400 A.D. Second semester carries through to the present.

Hist. 297-298 Special Studies in History

2 or 4 hours

These courses are designed to permit students to study with various faculty members in the department or with visiting instructors or foreign visitors.

Hist. 301-302 Modern European History I & II

4 hours each

A survey of European civilization from the Renaissance to the present. Second semester begins with 1815.

Hist. 324 Russian History

4 hours

A survey of the history of Russia from the Middle Ages to the present. Specific topics include the growth of Russian power, the emergence of Russia as a major player in the European state system, the transition from Czarist autocracy to Soviet totalitarianism, and the impact of the Soviet Union's role as superpower, both internally and externally.

Hist. 327 British History

4 hours

A survey of British society to the Elizabethan period followed by a more detailed study of the Elizabethan period through World War II. Topics such as the nature of the 18th century politics, the Industrial Revolution, liberal and Victorian England, the impact of the World Wars on British society, and the "Irish Question" are examined.

Hist. 351 Ancient Near Eastern Civilization

4 hours

This course introduces the student to the historical development of life, culture, and religions of Mesopotamia, Egypt, and the Syro-Phoenician coast, including international relations from pre-history to Alexander the Great. (May be taken for credit as R.S. 351.)

Hist. 353 Hellenistic Civilization

4 hours

An introduction to the Graeco-Roman Oriental world based on a survey of social and cultural developments from Alexander the Great to Julius Caesar. (May be taken for credit as R.S. 353.)

- Hist. 381 History of the Middle East and North Africa** **2 hours**
An historical survey of the rise of the Islamic empires from the time of the Prophet, including the Caliphates, the classical period of Islam, and the Ottoman rule to the end of World War II.
- Hist. 382 Cultural Life in the Middle East and North Africa** **4 hours**
A study of the cultural developments and impact of Islamic civilization, including religion, art, literature, philosophy, and law.
- Hist. 428 The Middle Ages** **4 hours**
A study of the decline of ancient civilization, the Byzantine and Islamic cultures, and especially the development of Western Europe to the 14th century.

American History

- Hist. 201-202 U.S. History I & II** **4 hours each**
A survey of the political, economic, and social growth of America. First semester covers the period of exploration to 1865; second semester from 1865 to the present.
- Hist. 225 West Virginia History, Government, and Geography** **2 hours**
The history of the western section of Virginia to the Civil War and the history and government of West Virginia to the present. The physical, political, and social geography of the state is included. Field trips to various sections of the state are included as part of the course.
- Hist. 288 The American Political Novel** **2 hours**
An examination of the political life in the United States at the municipal, state, and federal level as reflected in a number of political novels since 1932. The course examines *Grapes of Wrath*, John Steinbeck; *It Can't Happen Here*, Sinclair Lewis; *All the King's Men*, Robert Penn Warren; *The Last Hurrah*, Edwin O'Connor; and *Advise and Consent*, Alan Drury, plus an additional book selected for each student. (May be taken for credit as Pol. 288.)
- Hist. 341 Development of the American Nation** **4 hours**
A history of the United States from 1816 to 1861. Considers growth of American nationalism and sectionalism following the War of 1812, the rise of Jacksonian Democracy, territorial expansion, and the coming of the Civil War.
- Hist. 342 Age of Big Business** **4 hours**
A political, social, and economic history of the U.S. from 1865 to 1914. Emphasis is placed on the growth of industrialism during this period and the resulting attempts at social reform.
- Hist. 423 Contemporary U.S. History** **4 hours**
The history of the United States since 1945. The course will include a brief review of the Progressive Era, the 1920s and the New Deal. Films, records, contemporary magazines, scholarly journals, and newspapers are used in addition to the textbooks.
- Hist. 426 Latin America** **4 hours**
A study of the geography, politics, social composition, economic structure, history, and problems of Latin America.
- Hist. 465 Constitutional Law** **4 hours**
A study of the judicial elaboration and interpretation of the U.S. Constitution. A case study approach to the historical development of American constitutional principles. (May be taken for credit as Pol. 465.)
- Hist. 477 Historical Writings and Methods** **2 hours**
A study of the major works of the ancient, medieval, and modern European and American historians with emphasis on the various schools and methods of interpretation. The student also receives an introduction to the nature and methods of history as an intellectual discipline. Emphasis is placed on the technique of historical research, and the art of expression and critical analysis.
- Hist. 487-488 Independent Study** **2 or 4 hours**
- Hist. 490 Senior Project** **2-6 hours**
Begins first semester of the senior year.

Interdisciplinary Studies

Aims

The interdisciplinary studies program recognizes that some students are more likely to achieve the goals of an “integrated education” and a “self-examined life” as set forth by the Bethany Plan through a program of study combining work from several academic departments. The interdisciplinary studies program facilitates such study by providing the machinery needed for its implementation and evaluation, by aiding students in the study of interdisciplinary methods and problems, by critically evaluating students’ understandings of the methods and materials of various disciplines, and by requiring the students to integrate the knowledge of materials and methods derived from various disciplines around a single problem or idea.

Requirements for Major

The interdisciplinary studies department coordinates faculty-sponsored and student-initiated programs of study that cross departmental lines. The initiator of an interdisciplinary field of concentration is responsible for establishing and justifying its goals and curriculum. The program must include at least 24 hours (excluding the Senior Project), but may not exceed 72 hours. No more than 48 hours in any one department will be counted toward graduation. Each proposed interdisciplinary major must be approved by the faculty Interdisciplinary Studies Committee. All work is supervised by the Director of Interdisciplinary Studies who serves as the student’s academic advisor throughout the program of study.

Admission to the Interdisciplinary Studies Program

To be admitted to the program a student must submit a proposal for an interdisciplinary major to the Director of Interdisciplinary Studies prior to the last day of classes before mid-term of the second semester of the sophomore year. (The faculty Interdisciplinary Studies Committee may consider a later proposal if the student is willing to take more than the usual four years to complete degree requirements.) The proposal must follow the guidelines established by the faculty Interdisciplinary Studies Committee and be prepared with the guidance of the Director of Interdisciplinary Studies.

A proposal will be approved only from a student who has an overall grade point average of 3.0 at the time the proposal is made. To continue in the program the student must maintain the 3.0 grade point average during the semester in which the proposal is approved and during the following semester. (Under extraordinary circumstances the faculty Interdisciplinary Studies Committee may waive grade point regulations to consider a proposal from a student with a lower grade point average and establish a lower grade point requirement for that student’s continuing in the program.)

When a proposal has been approved it becomes the statement of goals and requirements for the student’s major and is filed in the Office of the Registrar. It may not be modified without the approval of the faculty Interdisciplinary Studies Committee.

Senior Year

Senior Comprehensive Examination: Students must have completed at least 24 hours of study in their special curriculum (including all courses designated as required in the original proposal) before they are eligible to take the examination.

The Senior Comprehensive Examination will be designed to measure the student’s grasp of methods and materials basic to the disciplines emphasized in the core curriculum; to test the student’s capacity for integrating materials and methods from the various disciplines; and to allow the student to evaluate the success of the special curriculum in light of his or her stated goals.

Senior Project: Students who wish to do 4-8 hour Senior Projects must have their projects approved by the Director on or before the last day of the last semester of their junior year.

Faculty Initiated or Departmentally Sponsored Interdisciplinary Programs

Education and Psychology

Psych. 100, 103, 315, 477, two courses selected from 324, 325, 326; Ed. 201, 202, 242, 345, 346, 348, 401, 440, 447, 448, 470; Sp.Ed. 410 or Psych 410; at least two semester-hours of credit in Sociology; I.S. 490. Additional information is available from the Education Department or the Psychology Department.

Graphics Design

FAA 101, 200, 205, 211 or 212, 214, 215, 314, 315, 316; Comm. 101, 301, 383, 406, 407; Econ. 200, 290; I.S. 490. Additional information is available from the Department of Fine and Applied Arts.

I.S. 100 Origins of Modern Western Thought **4 hours**
An exploration of the modern world and its origins stressing the basic ideas, historical events, aesthetic styles, and primary writings which have shaped the modern world. (Must be taken in the first year by all new freshmen and by all transfer students who matriculate as freshmen or sophomores.)

I.S. 155 Storytelling **1 hour**
A study of the practice and processes of storytelling and storytelling programs. Students prepare and present stories for coaching and counsel after observing experienced storytellers on video or in live performances. (Activity course: CR/NCR only. Students enrolled in Fr. Sem. 111: *The Storytelling Tradition* may not take this course concurrently.)

I.S. 201 World Hunger: The Quest for Survival **4 hours**
An examination of the problems of world food resources, production, and distribution. Special emphasis is on inequalities between the haves and the have-nots, the effects of malnourishment on human behavior and on social and political conditions, and alternative technological and political solutions to the problem. *Not open to Freshmen.*

I.S. 202 Energy: The World Crisis **4 hours**
An analysis of energy resources and needs of the modern world in historical and geographical context. Psychological, social, and political ramifications are examined and alternative solutions to energy problems are evaluated. *Not open to Freshmen.*

I.S. 203 International Terrorism **4 hours**
A study of the origins, nature, cost, containment, and prevention of terrorism, violence, and revolution in today’s world, focusing in particular on the reasons why many nations and peoples outside the ruling classes of the major developed nations turn to violence. *Not open to Freshmen.*

I.S. 204 Our Sexuality: A Global Perspective **4 hours**
An examination of issues concerning sexuality and sexual functioning around the world. Considered are the following topics: biological, psychological, and sociological aspects of sexuality; the development of sex roles; sexual myths; sexuality and religion; birth control; changing sex roles in today’s world.

I.S. 210 The Origins of Life**4 hours**

An exploration of answers to the question, "What is the probability that we, as humans, will encounter other life forms in the universe?" Emphasis is on the physical conditions necessary for the origin of life forms in the universe, particularly with respect to the origin of life on Earth. The history of ideas and concepts related to this question and a review of current theories and experimental work in this area are covered. The economic, philosophical and attitudinal impact of this question on today's society is examined. This course is designed for those majoring in the Social Sciences and the Humanities, although it may be taken by those majoring in the Sciences. Appropriate laboratory experiences and demonstrations will be an integral part of the course. *Not open to Freshmen.*

I.S. 251 Origins of Western Thought I: The Ancient World**4 hours**

An examination of ideal behavior as it emerges from and influences political, religious, scientific, philosophical, artistic, social and economic activity, and thought from early Greece to the fall of Rome. *Not open to Freshmen.*

**I.S. 252 Origins of Western Thought II:
The Medieval and Renaissance World****4 hours**

An examination of ideal behavior as it emerges from and influences political, religious, scientific, philosophical, artistic, social and economic activity, and thought in the Middle Ages and Renaissance. *Not open to Freshmen.*

I.S. 301-302 Heuristics**2 hours**

Investigation and discovery of methodologies of problem-solving within a broad spectrum of academic disciplines and pragmatic pursuits. *Open to juniors and seniors only. Prerequisite: permission of instructor.*

I.S. 487-488 Independent Study**2 or 4 hours****I.S. 490 Senior Project****4-8 hours**

Mathematics

Aims

To provide the general student with a knowledge of the foundations of mathematics; to give the prospective teacher an understanding and appreciation of the fundamental ideas of elementary mathematics; to provide a tool for the technical student; and to give the prospective graduate student a foundation for later study and research.

Requirements for Major

The student is required to take the following 24 hours in the department: Math. 201, 202, 203, 354, 400, 401; plus a senior project.

In addition, each student must complete one of the following tracks.

Mathematics: C.S. 142, 143, or 201; twelve hours from the following: Math. 326, 341, 344, 383, 384, 390.

Mathematics-Economics: Math. 231, 281, 282; Acct. 211; Econ. 200, 301, 302; C.S. 144 or 145.

Mathematics-Physics: Math. 341; Phys. 201, 202, 251 or 261, 300; C.S. 142 or 143.

Mathematics-Computer Science: C.S. 201, 202, 290, 390; Math. 341.

Mathematics Education: Math 103 or secondary school equivalent, 104 or secondary school equivalent, 201, 202, 203, 250, 281, 326, 354, 383, 400, 401, 480; C.S. 140 or 201, 482; Ed. 345. To be recommended for certification the student must also complete the courses in the professional education sequence described in the listing of the Education Department (Ed. 201 and the minor in Secondary Education). *The following courses are prerequisite to student teaching: Math. 250, 480; Ed. 345.*

Math. 103 College Algebra **4 hours**
The course prepares the student to take Calculus I and examines sets and operations on sets, numbers systems, solutions to equations, inequalities, functions and graphing, conic sections, synthetic division and the remainder theorem, exponential and logarithm functions, computation with common logarithms. (May not be taken if credit has been earned for Math. 201.)

Math. 104 Trigonometry **2 hours**
A study of radian measure, trigonometric functions and their graphs, fundamental identities, conditional trigonometric equations, inverse trigonometric functions, vectors, complex numbers, trigonometric form of complex numbers, and DeMoivre's Theorem.

Math. 141 Mathematics for the Liberal Arts Student **4 hours**
An introduction for the non-science major to the spirit and flavor of mathematics. Stresses fundamental concepts with the aim of clarifying the importance of mathematics in relation to other branches of knowledge. Topics that may be covered include sets, logic, the number concept, history of mathematics, the nature and use of geometry, computers, computer programming, and logical puzzles.

Math. 152 Finite Mathematics **4 hours**
This course is intended primarily for students of the biological or social sciences. It is also recommended for non-science majors desiring an acquaintance with mathematics. It is not a pre-calculus course. Concepts studied include logic, set theory, matrices, probability theory, linear programming, and game theory.

Math. 201 Calculus I **4 hours**
A study of real number system, equations of a line, study of the circle and parabola, functions, limits, and continuity, as well as techniques of differentiation and integration applied to maximum and minimum problems and to related rates. *Prerequisite: 3½ years of high school math, Math. 103, or permission of the instructor.*

Math. 202 Calculus II **4 hours**
An examination of the area between two curves, volumes of revolution, moments, centroids, hydrostatic pressure, and work. Integration and differentiation of transcendental functions. Methods of integration including integration by parts, partial fractions, and trigonometric substitution. Polar coordinates and graphs, area, and angles of intersection in polar coordinates. *Prerequisites: Math. 104 or high school equivalent; Math. 201 or advanced placement.*

Math. 203 Calculus III **4 hours**
Intermediate calculus with emphasis on vector methods and functions of several variables, scalar and vector products, partial differentiation and applications, directional derivative and gradient, multiple integrals with physical applications, expansion of functions, L'Hopital rule, sequences, and series. *Prerequisite: Math. 202.*

Math. 210 Discrete Structures **4 hours**
The fundamental algebraic, logical, and combinational concepts of computer science. Topics include graph theory, monoeds and finite automata, lattices, and Boolean algebras.

Math. 231 Quantitative Methods in Management **2 hours**
This course deals with applications of matrix algebra to business and economics, including problems involving cost minimization and profit maximization. (The necessary matrix algebra will be developed in the course. Primarily designed for students who intend to pursue a career in business.) *Prerequisite: Math. 103 or equivalent.*

- Math. 250 Mathematics for Early and Middle Childhood** **4 hours**
A course designed in content and teaching style for early and middle childhood pre-service teachers. The course will emphasize active student participation and a field placement component which will permit the students to develop materials and evaluation instruments as well as practice the teaching of mathematics concepts including the structure of the number systems, real number properties and the computation derived from them, problem solving strategies, and geometry and measurement. (Required for Middle Childhood.) *Prerequisite: permission of the instructor. Not open to Freshmen.*
- Math. 281 Statistical Methods I** **4 hours**
An introduction to statistical analysis including frequency distribution and graphic presentation of data, measures of central tendency, relative positions in a distribution, variability, the normal curve and its applications, correlation and regression, probability and statistical inference, testing differences between means, and analysis of variance. (Not open to students in the general program.)
- Math. 282 Statistical Methods II** **2 hours**
A study of statistics including testing goodness of fit, contingency tables, regression and correlation analysis, analysis of variance, and non-parametric methods.
- Math. 326 Introduction to Modern Geometry** **4 hours**
An introduction to Euclidean and non-Euclidean geometries and synthetic projective geometry, the concept of limit and infinity, geometrical constructions, and recent developments and theorems. *Prerequisites: Math. 201, 202, or permission of the instructor.*
- Math. 341 Differential Equations** **4 hours**
A study of the methods of solution of ordinary and partial differential equations and applications to the physical sciences. *Prerequisite: Math. 202.*
- Math. 344 Complex Variables** **2 hours**
A study of complex numbers, elementary functions, analytic functions, contour integration, Taylor and Laurent series, conformal mapping, boundary value problems, and Laplacian equations. *Prerequisite: Math. 203.*
- Math. 354 Linear Algebra** **4 hours**
A study of geometric vectors, matrices and linear equations, real vector spaces, linear transformations and matrices, and inner product spaces.
- Math. 383 Probability & Statistics I** **4 hours**
An introduction to probability, basic distribution theory, limit theorems, mathematical expectation, probability densities, random variables, sampling distributions, point and interval estimation, tests of hypotheses, regression and correlation, and analysis of variance. *Prerequisite: Math. 202 or permission of the instructor.*
- Math. 384 Probability & Statistics II** **2 hours**
The application of the concepts of probability to statistical procedures such as sampling estimations, tests of hypothesis, regression theory, and Bayesian methods. *Prerequisite: Math. 383.*
- Math. 390 Numerical Analysis** **4 hours**
A study of numerical methods in evaluating integrals and differential equations, techniques in finding the roots of polynomials, solving systems of linear equations and matrix manipulation. *Prerequisites: C.S. 142, 143 or 201 and Math. 201, 202. (May be taken for credit as C.S. 390.)*
- Math. 400 Modern Abstract Algebra** **4 hours**
A study of groups, rings, integral domains, fields, and vector spaces.
- Math. 401 Advanced Calculus** **4 hours**
A study of the Jacobian, Lagrange multipliers, limits and continuity, completeness of the Real numbers, sequences, series, Fourier series and orthogonal functions, partial differential equations, and Implicit Function Theorem. *Prerequisite: Math. 203.*
- Math. 478 Senior Seminar** **2 hours**
An examination of the historical development and cultural significance of mathematics. A study of modern trends in mathematical thought and application as revealed in the literature. An analysis of career opportunities in mathematics.

Math. 480 Methods and Materials in Teaching Mathematics	2 hours
A study of the approved methods in teaching mathematics at the secondary level; class period activities of the teacher; procedures and devices in teaching; organization of materials, testing, aims, and modern trends. (May be taken for credit as Ed. 480.)	
Math. 487-488 Independent Study	2 or 4 hours
Math. 490 Senior Project	2-8 hours.

Philosophy

Aims

To assist the student in discovering and developing sound bases for interpreting self and society through a careful examination of beliefs, actions, and claims to knowledge; to assist the student in becoming aware of the nature and status of philosophical problems, commitments, ideologies, and models that serve as the foundation of human life; and to provide the student who expects to pursue graduate studies in philosophy with a sound basis in the major areas of the field.

Requirements for Major

A major in Philosophy requires satisfactory completion of a minimum of 28 hours, including Phil. 100, 123, 124, 333, 334, 335, plus a Senior Project. The Senior Project is received and evaluated in the final semester of the student’s academic program. Related requirements are I.S. 251, 252.

The student who is considering graduate work should be aware that many good graduate programs in philosophy require a reading knowledge of French and German.

Requirements for Minor

Phil. 100; either 123 or 124; four hours from Phil. 256, 333, 334, 353; four hours from Phil. 252, 254, 335, 355, 358.

Phil. 100 Introduction to Philosophy	4 hours
This course is designed primarily to involve students in an introductory exploration into the range of problems with which philosophers wrestle. “Living issues” confront us in such vital areas as the nature of self, man, mind, values, knowing, freedom, and of philosophy, philosophic outlooks, and religious traditions.	

Phil. 123 Basic Logic	4 hours
Students are assisted in developing the ability to recognize the differences between emotional intensity and valid argument, between verbal disputes and conclusions that follow (logically) from premises. Recognition of the bases of these differences and development of the very practical abilities to recognize, construct, and analyze various forms of argument and to detect logical errors (fallacies) are important objectives of the course.	

Phil. 124 Ethics: Personal and Social	4 hours
An examination of different personal and social foundations upon which ethics or morals can be (and have been) built, such as pleasure, happiness, feeling, reason, obligation, usefulness, and relativism; significant moral problems in several areas of life and work; and basic criteria for moral decision-making.	

- Phil. 250-259 Special Topics in Philosophy** **2 or 4 hours**
- Phil. 252 Philosophy of Mysticism** **4 hours**
 An examination of what is involved in the experience and claims of several mystical groups or representatives, from ancient to contemporary times. The course will emphasize trying to understand the basic claims that mystics make, assessing the kinds of certainty, truth and insight claimed, and exploring the place of "the mystical" in human experience. (Offered in alternate years.)
- Phil. 254 Contemporary Ethical Issues** **4 hours**
 An orientation to the relatively new attitude toward normative ethical issues; identification and examination of key normative concepts and principles (e.g., honesty, fidelity, loyalty, obligation, autonomy, dependence, paternalism, freedom, justice, self-respect and dignity, and rights) and problems that cut across several areas of social and professional life; and exploration of how these concepts and principles are involved in attempts to solve moral problems in the domains of social life and vocational life in, e.g., public policy, business, and mass communications. (Offered in alternate years.)
- Phil. 333 A Topical History of Philosophy** **4 hours**
 A study of the highlights of philosophical development and change from ancient through contemporary times, focusing on the topics of Metaphysics, Epistemology, Ethics, Political Philosophy, Philosophy of Religion, Analytic Philosophy, Continental Philosophy, and, briefly, Eastern Philosophy. (Offered in alternate years.)
- Phil. 334 Existential Philosophy** **4 hours**
 A study of the works of certain predecessors of existentialism, the influences of Kierkegaard and Nietzsche, and those themes and issues portrayed in selected works of Sartre, Camus, and others that may be taken as typical of that amorphous movement in the history of philosophy known as Existentialism. (Offered in alternate years.)
- Phil. 335 Eastern Philosophies** **4 hours**
 A survey of the basic tenets and dominant features of Indian Philosophy and the basic teachings and characteristics of Buddhist and Chinese Philosophies. (Offered in alternate years.)
- Phil. 350-359 Advanced Topics in Philosophy** **2 or 4 hours**
- Phil. 352 Natural Philosophy** **4 hours**
 An examination of man's changing ideas about the universe. Emphasis is placed upon the role of science as a social institution contributing to these changing beliefs. (Offered in alternate years. May be taken for credit as G.S. 101.)
- Phil. 353 History and Philosophy of Science** **4 hours**
 A study of some of the major ideas conceived by western man in attempting to comprehend and describe the natural world. *Prerequisite: One year of college level science or permission of the instructor.* (Offered in alternate years. May be taken for credit as G.S. 209.)
- Phil. 355 Philosophy of Religion** **2 or 4 hours**
 An examination of the major aspects of religion from a philosophic perspective. Study will include the religious experience, the meaning and significance of faith, belief and criteria, knowledge, proof, evidence and certainty, concept of deity, and scope and impact of religion in human life. (Offered in alternate years.)
- Phil. 358 Aesthetics, The Arts, and Philosophy** **2 or 4 hours**
 An examination of the nature of aesthetic experience and its relation to other kinds of experience, as well as its place in art production, appreciation and creativity; the notion of "a work of art"; language used in description, interpretation, and evaluation of art; and different interpretations of aesthetics. Opportunities are provided for giving special attention to particular art areas as well as to "the Arts." (Offered in alternate years.)
- Phil. 477-478 Senior Seminar** **2 hours**
 This seminar seldom consists of a general review of all areas of philosophy; the topic or particular area of study is chosen as a result of student and faculty conferences. Student ability, interest, and need are important factors. *Conferences with and permission of the head of the department are required before enrollment.*
- Phil. 487-488 Independent Study** **2 or 4 hours**
- Phil. 490 Senior Project** **2-8 hours**

Aims

To enhance the health of the student; to provide opportunities for students to participate and develop proficiency in sport activities; and to prepare students for careers in physical education.

Requirements for Major

A minimum of 34 semesters hours of courses in the department exclusive of the senior project, which must include PE 110, 210, 225, 226, 230, 231, 243, 244, 301 or 302; 309 or 355; 340, 426, 427, 480, and 481; Bio. 100, 167; FAA 225; Sp.Ed. 205; the courses in the professional education sequence described in the listing of the Education Department (Ed. 201 and the minor in Secondary Education). *The following courses in Physical Education are prerequisite to student teaching: P.E. 225, 230, 231, 480, 481.*

P.E. 100-165 Physical Education Performance Courses 1 hour each

These courses examine skills in performances; knowledge of strategies, rules, equipment, and methods; participation in forms of sport. (Activity course: CR/NCR only. Exception: P.E. 110 must be taken for a letter grade by students pursuing the Physical Education major.)

P.E. 103	Basic Aquatics	P.E. 155	Varsity Football
P.E. 110	Advanced Aquatics I (Lifeguarding)	P.E. 156	Varsity Golf
P.E. 135	Tennis - Badminton	P.E. 157	Varsity Soccer (M)
P.E. 139	Physical Fitness	P.E. 158	Varsity Swimming (M&W)
P.E. 150	Varsity Baseball	P.E. 161	Varsity Track (M&W)
P.E. 151	Varsity Basketball (M)	P.E. 162	Varsity Volleyball
P.E. 152	Varsity Basketball (W)	P.E. 163	Varsity Softball
P.E. 153	Varsity Cross Country (M&W)	P.E. 164	Varsity Soccer (W)

P.E. 167 Introduction to Mammalian Anatomy and Physiology 4 hours

The study of mammalian anatomy as exemplified in the cat. Discussion and study of the functioning of the tissues and organ systems of the human body; lab study of the anatomy of the cat; human physiology. (Not open to students majoring in Biology. May be taken for credit as Bio. 167.)

P.E. 210	Advanced Aquatics II (WSI)	1 hour
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This course emphasizes swimming skills leading to Water Safety Instructor's certification. (Activity course: CR/NCR only. Exception: must be taken for a letter grade by students pursuing the Physical Education field of concentration.)

P.E. 225 Health Education for Children 2 hours

A study of aspects of health applicable to children in elementary and middle schools.

P.E. 226 First Aid as Related to the Principles of Biology 2 hours

This course emphasizes the biological principles in the standard first aid and personal safety course of the American Red Cross. Red Cross certificates may be earned by those passing the examination. Opportunity for instructor's certificates will be presented as an option at the end of the course. (May be taken for credit as Bio. 105.)

P.E. 230 Lab Analysis: Team **2 hours**

This course emphasizes skill development and analysis and cognitive acquisition of rules, equipment, strategies, and methods. Sports covered include soccer, volleyball, field hockey, football, basketball, and softball.

P.E. 231 Lab Analysis: Individual**2 hours**

This course emphasizes skill development and analysis and cognitive acquisition of rules, equipment, strategies, and methods. Sports covered include archery, badminton, dance, golf, tennis, track and field, and gymnastics.

P.E. 243 Socio-Psychological Perspective of Physical Activity**4 hours**

A consideration of small sport groups as micro-social systems; application of group dynamics theory and small group research to the study of sport groups; investigation of the influence of group member characteristics, environmental factors, interpersonal relations, and group structural characteristics on individual member adjustment and group effectiveness. Designed to investigate those aspects of psychology which influence the performance and the participant in sport. Additional factors such as motives, arousal, aggression, and other socio-psychological variables will be covered. (May be taken for credit as Psych. 243.)

P.E. 244 Philosophical-Historical Perspective of Physical Activity**4 hours**

A philosophical inquiry into physical education. Consideration is given to a general philosophical interpretation of the nature and purpose of physical education and review of the historical and philosophical changes in American education with emphasis on the developing roles of professional physical education.

P.E. 300-308 Clinics**2 hours each**

These courses prepare students to teach particular sports at any level within the school environment. Emphasis is on the theory of the sport and on methodologies for teaching it.

P.E. 301 Football, Softball, Track and Field**P.E. 302 Soccer, Volleyball, Basketball****P.E. 309 Intramural Sports****2 hours**

A study of the organization, administration, and objectives of the intramural athletic programs.

P.E. 340 Prevention and Care of Injuries**2 hours**

An examination of common hazards of play and athletics, and preventive measures and treatment of injuries. Red Cross First Aid Certificate may be earned by those who pass the examination. *Laboratory fee: \$30.*

P.E. 341 Advanced Athletic Training**4 hours**

Major emphasis is placed on those skills needed by personnel involved in the field of sports medicine. Orthopedic evaluations of injuries, treatment of crisis situations, and study of conditioning and rehabilitation programs will be covered. *Prerequisites: P.E. 340, 426, 427. Laboratory fee: \$30.*

P.E. 355 Coaching Sport**2 hours**

An examination of the basic philosophy and principles of athletics as integral parts of physical education and general education. State, local, and national regulations and recommendations related to athletics; legal considerations; function and organization of leagues and athletic associations; personal standards and responsibilities of the coach as a leader; public relations; general safety procedures; general principles of budgets, records, purchasing, and facilities.

P.E. 426 Kinesiology**2 hours**

An examination of anatomy and mechanics as applied in the study of the human body during physical exercise, with special emphasis on the analysis of motion in specific sports skills and exercise patterns. *Prerequisite: Bio. 167.*

P.E. 427 Physiology of Muscular Activity**2 hours**

An examination of anatomy and physiology as applied in the study of the human body during physical exercise, with special emphasis on the application of physiological variables in specific sports skills and exercise patterns. *Prerequisite: Bio. 167.*

P.E. 480 Teaching Physical Education	4 hours
An analysis of current methods, materials, and techniques pertinent to teaching and administering physical education and athletics. Development of an understanding of the formative and summative evaluation process in the cognitive, affective, and psychomotor domains of physical education. Emphasis is given to data-collection techniques (measurement), data-manipulation (statistics), data evaluation, and data interpretation in view of teaching. Integration of administrative processes and techniques with teaching and evaluation.	
P.E. 481 Elementary School Physical Education	2 hours
A study of teaching physical education at the elementary level. A study of this age group's physical, motor, social and emotional development, plus activities contributing to proper physical development.	
P.E. 487-488 Independent Study	2 or 4 hours
P.E. 490 Senior Project	2-8 hours

Physics

Aims

To introduce students to the current body of knowledge expressing the physicist’s concepts of the universe and its physical laws; to provide courses serving the needs of liberal arts students who are concentrating in physics or are interested in the physical and life sciences, medicine, optometry, therapy, engineering, or teaching. Students may choose from a variety of courses to satisfy a distribution requirement, to attain enough competence for a future career in a related field, or to attain sufficient breadth and depth to pursue an advanced degree in physics.

Requirements for Major

A minimum of 36 hours in the department, including Phys. 201, 202, either 221 or 222, 251, 261, 300, 314, 316, 318, and either 305 or 306, plus a Senior Project. Those students expecting to do graduate work are urged to take both 221 and 222 and both 305 and 306.

Combined plans with Case Western Reserve University, Columbia University, a dual-degree program with Georgia Institute of Technology, and a Three-Two Plan with Washington University are available to students interested in various engineering or industrial management degrees.

Students interested in careers in engineering, industrial management, mathematical modeling, etc., which might require a background in physics, mathematics, economics, or chemistry, are encouraged to speak to the appropriate department head and the director of the dual-degree engineering program, or to the Director of Interdisciplinary Studies if they wish to design an interdisciplinary program of study more suited to their career goals than a traditional departmental program.

Requirements for Minors

- Experimental Physics:** Phys. 201, 202, 221, 222. (*Math. 201 is a prerequisite for, or to be taken concurrently with, Phys. 201.*)
- Theoretical Physics:** Phys. 201, 202, plus eight hours from 251, 261, 300. (*Math. 201 is a prerequisite for, or to be taken concurrently with, Phys. 201.*)

Requirements for Teaching Certification

Only Physics majors who have completed the following courses will be recommended for state certification to teach Physics in the secondary schools: Phys. 201, 202, 221, 251, 261, 300, 305 or 306, 318, 480; the courses in the professional education sequence described in the listing of the Education Department (the minor in Secondary Education). *Phys. 480 is prerequisite to student teaching.*

Phys. 100 Everyday Physics **4 hours**

This course is designed for non-science students. A study from non-technical, non-mathematical viewpoints of the aims, methods (experimental and theoretical), and achievements in the attempts to understand the basic principles governing the physical world. The course begins with commonplace observations and concrete examples and then proceeds to generalizations and hypotheses that unify these observations.

Phys. 201-202 General Physics I & II **4 hours each**

First Semester: mechanics, heat, and wave phenomena. Second Semester: electricity and magnetism, light and selected topics in atomic and nuclear physics. Specifically intended for science, engineering, and other students who have had or are concurrently taking calculus. (Three hours of lecture and three hours of lab each week.)

Phys. 221 Introductory Electronics **4 hours**

An introduction to electrical and electronic circuits and their elements, with an emphasis on applications. *Prerequisite: Phys. 201-202, or permission of the head of the department.*

Phys. 222 Digital Electronics **4 hours**

An introduction to digital electronics with applications in instrumentation and computer electronics. Topics include Boolean Algebra, basic gates, logic families, encoders-decoders, astable/monostable multivibrators, flip-flops, counters, readouts, shift registers, bi-directional bus structure, serial-parallel/parallel-serial data conversion, and D to A and A to D conversion. (Three hours of lecture and two hours of lab each week. May be taken for credit as C.S. 222.) *Prerequisite: Math. 103 or equivalent or permission of the head of the department.*

Phys. 251 Mechanics **4 hours**

A study of particle mechanics, central force motions, motions of rigid bodies, free, forced and coupled oscillations, rotations about an axis, moving coordinates systems, conservation theorems, Lagrange's equations, relativistic mechanics, mechanics of continuous media, and theory of small vibration. *Prerequisite: Phys. 201-202.*

Phys. 261 Electricity and Magnetism **4 hours**

A study of electrostatics, magnetostatics, scalar and vector fields, Poynting's vector, electrodynamics, Maxwell's equations, boundary conditions, and wave propagation. *Prerequisite: Phys. 201-202.*

Phys. 300 Modern Physics **4 hours**

A presentation, based on mathematical and physical reasoning, of the foundations of modern physics. Treats the subjects of special relativity, kinetic theory, atomic theory, and introductory quantum mechanics on the level of the Schroedinger equation. (Intended for chemistry, mathematics, physics, or pre-engineering majors.) *Prerequisite: Phys. 201-202 or permission of the head of the department.*

Phys. 305 Geometric Optics **2 hours**

The study of light from a non-wave theory standpoint. This course includes the study of reflection, and optical instruments. *Prerequisite: Phys. 201-202 or permission of the head of the department.*

Phys. 306 Physical Optics **2 hours**

Topics covered in this course include interference, dispersion, diffraction, polarization, electromagnetic nature of light, and quantum optics. *Prerequisite: Phys. 201-202.*

Phys. 307 Heat and Thermodynamics **2 hours**

A study of macroscopic properties of matter from a thermodynamic point of view. Topics include equation of state, the first law of thermodynamics and its consequences, entropy and the second law of thermodynamics, thermodynamic potentials, and applications of thermodynamics to simple systems. *Prerequisite: Phys. 201-202.*

Phys. 308 Statistical Thermodynamics	2 hours
A study of how the microscopic properties of a system can be determined using the methods of kinetic energy and statistical mechanics to calculate the dependence of the macroscopic properties of a system on thermodynamic variables. The Bose-Einstein and Fermi-Dirac statistics are discussed and applied to different systems. <i>Prerequisite: Phys. 307.</i>	
Phys. 314 Introduction to Classical Quantum Mechanics	2 hours
A continuation of the study of classical quantum mechanics begun in Phys. 300. Topics include the three-dimensional Schroedinger equation, selection rules, addition of angular momentum, fine structure in hydrogen, exchange symmetry, the Zeeman effect, and stimulated emission. <i>Prerequisite: Phys. 300 or permission of the head of the department.</i>	
Phys. 316 Selected Topics in Solid State and Nuclear Physics	2 hours
A continuation of the study of modern physics. Topics include molecular bonding and spectra, free-electron theory of metals, band theory of solids, superconductivity, nuclear shell model, radioactivity, nuclear reactions, and elementary particles. <i>Prerequisite: Phys. 314 or permission of the head of the department.</i>	
Phys. 318 Advanced Physics Lab	2 hours
Experiments concerning topics covered in Phys. 300 are emphasized.	
Phys. 477 Seminar in Physics	2 hours
A survey of physics for review and correlation of various fields within the discipline. <i>Prerequisite: Permission of the head of the department.</i>	
Phys. 480 Methods and Materials in Teaching Physical and Life Sciences	4 hours
A study of the aims and methods of teaching the physical and life sciences in the secondary schools. Special attention is given to teaching general laboratory procedures and techniques of teaching. Each of the departments in the physical and life sciences participates in the program. <i>Prerequisite: 16 hours in one of the physical or life sciences or permission of the instructor.</i> (May be taken for credit as Ed. 480 or G.S. 480.)	
Phys. 487-488 Independent Study	2 or 4 hours
Phys. 490 Senior Project	2-6 hours
Research problems in theoretical or experimental physics. Experimental physics if offered in such areas as vacuum systems, machine tool operation, electron systems, spectroscopy, electron microscopy, microwave propagation, nuclear radiation and computer science. Theoretical physics projects are unlimited in scope and are arranged through consultation with the student's faculty advisor.	

Political Science

Aims

To provide for the study of American political structures, institutions and processes as they relate to domestic politics and government, to foreign policy and international relations, and to the making of public policy. To support the career objectives of students in public service (management, administration, and operations) and in the private sector (management, administration and operations).

Requirements for Major

Students are required to complete a minimum of 38 hours in the department exclusive of the Senior Project. All students will complete Pol. 225 and Pol. 478 plus at least 26 additional hours of classroom based courses and a 4-hour internship. Related requirements are Hist. 201-202. Cognate courses are recommended in History,

Philosophy, Economics and Business, Sociology, Foreign Languages, Communications, Mathematics (especially statistics), Computer Science, and science.

Requirements for Minors

American Government and Politics: Pol. 225, 320, 321, 322, 339, either 300 or 227-228.

International Relations: Pol. 243, 328, 341; Econ. 200, 360.

Public Policy: Pol. 231, 232, 331, 332; Econ. 200, 301. (*Math. 201 and Math. 281 are prerequisites for Econ. 301.*)

Requirements for Teaching Certification

Only Political Science majors who have completed the following courses will be recommended for state certification to teach Social Studies in the secondary schools: Hist. 101, 201, 202, 225; Soc. 100; Econ. 200; G.S. 202 or Soc. Sci. 302; Pol. 225; I.S. 100; R.S. 100; Soc. Sci. 480; the requirements for certification for Social Studies Middle Childhood Education 5-8; the courses in the professional education sequence described in the listing of the Education Department (Ed. 201 and the minor in Secondary Education). *Soc. Sci. 480 is prerequisite to student teaching.*

Pol. 225 American Government **4 hours**

An introduction to the formal and informal structures, institutions, and processes which comprise the American political system at the national level.

Pol. 227-228 Intergovernmental Relations **2 hours each**

The courses cover US Constitutional provisions about federal-state-local governmental relationships and interrelationships and examine the development of the federal system. Major topics include fiscal federalism, the changes in the nature of federal-state relationships, joint programming, the grants-in-aid system, and current issues and proposals regarding federal and state program responsibilities. The implications of federal decisions for states and local governments are included.

Pol. 231 The Politics of Public Policy **4 hours**

An examination of selected models and approaches to the study of public policy. While providing an overview of the policy process, the focus of attention is on how public issues are identified, defined, get on the public agenda, and how they get on (or are kept off) the official agenda. Selected case studies of public policy-making are analyzed.

Pol. 232 Public Policy Formation **4 hours**

The focus is on the development of proposed courses of action for dealing with public problems, an examination of the sources of policy proposals, the criteria used by officials in making choices, and the mobilization of support for the policy and program decisions. Special attention is paid to the role of the policy analyst and the ethical dimensions of policy-making and analysis.

Pol. 243 International Politics **4 hours**

An analysis of the factors involved in the relations among states, traditionally and in a global perspective. This analysis is applied to theoretical, historical, and current political and political-economic situations.

Pol. 288 The American Political Novel **2 hours**

An examination of the political life in the United States at the municipal, state, and federal level as reflected in a number of political novels since 1932. The course examines *Grapes of Wrath*, John Steinbeck; *It Can't Happen Here*, Sinclair Lewis; *All the King's Men*, Robert Penn Warren; *The Last Hurrah*, Edwin O'Connor; and *Advise and Consent*, Alan Drury, plus an additional book selected for each student. (May be taken for credit as Hist. 288.)

Pol. 300 Public Administration **4 hours**

An examination of the basic concerns of American public agencies, principally federal; problems of planning, organization, staffing and efficiency; problems of their proper place in the political arena; problems of relating democratic principles of administrative actions.

Pol. 311 Public Budgeting Process **4 hours**

This course examines the process and politics of budgeting in the federal government, with some attention to state and local budgeting problems. The role of the President and the executive branch in budgeting, congressional processes for budget approval, and the implementation of the budget are studied in depth. Recent budgeting systems used in the federal government are included, as well as examination of the importance of budgeting to overall program and policy development in government. Students critique an actual public budget as part of the course.

Pol. 320 Legislative Process **4 hours**

The course deals with the role of Congress in federal policy-making. The constitutional powers of Congress are examined, but the primary emphasis is on the influences on Congress and its organization for decision-making. The importance of constituents, the executive branch, political parties, colleagues, congressional committees, and the media are all included. Some attention is also given to state legislatures.

Pol. 321 Executive Leadership **4 hours**

This course focuses on the institutionalized presidency and the leadership role of the President. The constitutional powers, historical development, responsibilities, current powers and the problems of the presidency are examined. The roles of the President in policy-making are analyzed, especially the President's relationships with the White House Office, the Executive Office of the President, the Cabinet, Congress, the courts, the bureaucracy, and parties and interest groups are included.

Pol. 322 Judicial Behavior **4 hours**

The role of the courts in the political process and as policy-makers will be a focus of study. Various approaches to the understanding of the behavior of judges and legal system actors are examined. The influence of values, social background factors, professional socialization, small group dynamics, role perceptions, interest group interaction, and recruitment and selection processes on judicial and legal actor decision-making will be studied. The problems of the impact of and compliance with judicial decisions are examined.

Pol. 325 Political Economy **4 hours**

An examination of the links between the economy, polity, and policy. A particular focus is on the role of government in the allocation of goods, especially public goods. Basic socio-economic decision-making mechanisms will be critically analyzed, including the market, government, hierarchy, and bargaining. A variety of political economic approaches will be examined including traditional economic, non-economic, and Marxist approaches.

Pol. 328 Comparative Government **4 hours**

A survey of the major approaches to the study of political systems with attention to their similarities and differences. Focuses on such approaches as historical, ideological, structural, functional, whole systems, and political economic. Liberal democratic, communist, and Third World systems are examined in terms of the whole historical systems approach. Students undertake comparative case studies.

Pol. 331 Public Policy Implementation **4 hours**

The analysis of the systemic, organizational, and personal factors influencing the behavior of those who have authority to carry out policy directives. In addition, the influence of intermediaries, administrative lobbies, issue networks, recipients-clients, the media, and policy evaluators on the implementation of public policy will be studied. Legal, bureaucratic, and personal imperatives affecting the composition and interaction of actors in relation to specific policies are examined.

Pol. 332 Public Policy Evaluation **4 hours**

This course focuses on the ways in which public programs are evaluated. It examines who does the evaluation and the types of evaluation methods that may be used. Students critique and design policy evaluations as part of the course.

Pol. 339 American Political Parties and Interest Groups **4 hours**

A study of major and minor political parties in the U.S. Attention is given to the history, structure, functions, tactics, and financing of political parties in a democratic system, as well as to the American electoral process and a brief look at foreign party systems. The role of interest or pressure groups in a democratic pluralist society is also given major attention. *Pol. 225 or Hist. 201-202 are recommended for background in the field.*

- Pol. 341 U.S. Foreign Policy** **4 hours**
 An examination of the assumptions and mechanics behind the making of US foreign policy since World War II. The material provides frameworks for analyzing and evaluating various interpretations of US national security and foreign policy, US national interests and commitments. Case studies in US foreign policy are analyzed.
- Pol. 357 History of Political Philosophy** **4 hours**
 A survey of the major literature in the evolution of political philosophy from the classical period to Karl Marx. A special effort is made to relate the principal concepts in political philosophy, such as justice, freedom, and equality, to contemporary politics.
- Pol. 465 Constitutional Law** **4 hours**
 The study of the judicial elaboration and interpretation of the U.S. Constitution. A case study approach to the historical development of American constitutional principles. *Pol. 225 or Hist. 201-202 are recommended for background in the field.* (May be taken for credit as Hist. 465.)
- Pol. 470 Internship in Politics, Public Administration, and Public Policy** **2-8 hours**
 A faculty supervised off-campus learning experience for a student concentrating in politics with an academic dimension involving off-campus work and a substantive research project. A faculty member must approve the internship experience and the projected academic research work prior to the student's beginning the internship experience. Off-campus work is jointly supervised by the faculty member and an approved off-campus mentor. The student is evaluated by the faculty supervisor who may take into consideration an evaluation of the student's performance by the off-campus mentor. In all cases an internship project must be submitted for evaluation by the student in order to complete successfully the requirements for the internship.
- Pol. 478 Research Methods in Political Science** **4 hours**
 A consideration of the scope and political science through an examination of approaches, models and methods utilized in research in the field. Attention is given to the scientific and quantitative dimensions of this research. Includes instruction, application, and experience in computer applications in political science and the preparation of a research design.
- Pol. 487-488 Independent Study** **2 or 4 hours**
- Pol. 490 Senior Project** **2-6 hours**
 Begins first semester of the senior year.

Psychology

Aims

To assist the student in gaining a basic knowledge of psychology as the science of human behavior; to foster development of social awareness and social adjustment through an understanding of the fundamental similarities and differences among people; to encourage both original and critical thinking; and to give background preparation for professions which deal with individual and group behavior.

Requirements for Major

Two plans for majoring in Psychology are offered — one leading to the Bachelor of Arts degree and the other to the Bachelor of Science degree.

The Bachelor of Science plan is designed for students most interested in the scientific aspects of psychology, particularly for those who are considering graduate work in experimental or clinical psychology. Most Ph. D. programs in experimental or clinical psychology require the types of undergraduate courses included in the Bachelor of Science plan.

The Bachelor of Arts plan is flexible, and can be designed to meet the needs of students who wish to pursue masters-level education in a variety of fields, such as counseling, organizational psychology, and guidance, desire a broad undergraduate education and graduate education in areas outside of psychology, such as business, law, and education, or seek a broadly applicable undergraduate degree.

Requirements for the Bachelor of Arts Degree

The Bachelor of Arts degree requires a minimum of 24 hours in the department (including Psych. 100, 103, 415, and 477) plus a Senior Project. Psych. 203 is strongly recommended, but not required. Depending upon the direction of the student’s interests, the department sees as particularly useful and relevant courses in sociology, social work, philosophy, child and adolescent development, biology, and the history of scientific thought.

Requirements for the Bachelor of Science Degree

The Bachelor of Science degree requires a minimum of 30 hours in the department, including Psychology 100, 103, 203, 311, 312, 415, and 477, as well as a Senior Project. Six hours are also required in natural science. Two of these must either be in physiological psychology (Psych. 335) or in biology courses stressing animal biology, physiology, or genetics. The remaining four hours may be in similar biology courses, physics, or chemistry (including Chem. 100).

Students planning on graduate school in psychology are also advised to take at least one course in calculus and to obtain some skills in computer use. It should also be kept in mind that most graduate schools require Ph. D. candidates to show a reading knowledge of one or two foreign languages, usually French, German, or Spanish.

Requirements for Teaching Certification

Only Psychology majors who have completed the following courses will be recommended for state certification to teach Social Studies in the secondary schools: Hist. 101, 201, 202, 225; Soc. 100; Econ. 200; G.S. 202 or Soc. Sci. 302; Pol. 225; I.S. 100; R.S. 100; Psych. 480; the requirements for certification for Social Studies Middle Childhood Education 5-8; the courses in the professional education sequence described in the listing of the Education Department (Ed. 201 and the minor in Secondary Education). *Psych. 480 is prerequisite to student teaching.*

Psych. 100 General Psychology **4 hours**
An introduction to the general field of psychology, including learning, motivation, sensation, perception, cognition, personality, abnormal behavior, testing, physiological psychology, and social psychology.

Psych. 103 Quantitative Methods in Psychology **4 hours**
An introduction to the basic problems and techniques of measurement in psychology and to basic statistical techniques used in psychological research. This course also includes an introduction to designs for research and experimentation.

Psych. 186 Psychology of Consciousness **2 hours**
A consideration of the nature of human consciousness, concentrating upon both normal consciousness and altered states of consciousness resulting from dreams, hypnosis, biofeedback, drugs, and meditation. Emphasis is given to recent explorations concerning two major modes of consciousness: the intellectual and the intuitive.

Psych. 200 Contemporary Issues in Psychology: Dual Career Families **2 hours**
An examination of issues influencing women’s career choices and opportunities. Topics include division of household chores in dual career families, the effects of childbearing (or perceived potential for childbearing) on hiring and promotion decisions, child care concerns, and the impact of these factors on women’s career aspirations.

Psych. 203 Research Methodology **4 hours**

An intermediate level examination of various types of research design, and important issues in design and statistical analysis. Students propose pilot research projects as an application of principles covered in the course. *Prerequisite: Psych. 103 or Math. 281.*

Psych. 243 Socio-Psychological Perspective of Physical Activities **4 hours**

A consideration of small sport groups as micro-social systems; application of group dynamics theory and small group research to the study of sport groups; investigation of the influence of group member characteristics, environmental factors, interpersonal relations, and group structural characteristics on individual member adjustments and group effectiveness. Designed to investigate those aspects of psychology which influence the performance and the participant in sport. Additional factors such as motives, arousal, aggression, and other socio-psychological variables will be covered. (May be taken for credit as P.E. 243.)

Psych. 275 Student Development in Higher Education **2 hours**

A study of the philosophy of higher education and the development of the individual student within the college environment. Emphasis is placed upon personal growth, communication skills, group dynamics, and residence hall programming. Didactic and experiential learning in the areas of personal, academic, and vocational counseling is included. *Enrollment limited to Resident Assistants.* (May be taken for credit as Ed. 275.)

Psych. 287 Organizations and Human Behavior **4 hours**

A study of specific aspects of organization culture such as motivation, conflict, power, and leadership. Exercises and simulations are emphasized which focus on improving the effectiveness of organizations by strengthening human processes. (May be taken for credit as Econ. 287.)

Psych. 311 Experimental Psychology I **4 hours**

This course gives students experience, at the intermediate level, with the research process within psychology. Students will engage in experimental work in the areas of perception, cognition, and social processes. Some familiarity with computers is desirable. *Prerequisites: Psych. 100, 103.*

Psych. 312 Experimental Psychology II **4 hours**

A continuation of Psych. 311, covering the areas of learning, perceptual-motor skills, and motivation. *Prerequisites: Psych. 100, 103.*

Psych. 315 Modification of Behavior **2 hours**

The course has two main aims: to help the student learn systematically to analyze behavior in terms of reinforcement principles and to help the student develop skills in the application of these principles to the modification of behavior in practical situations. Examples of the latter arise in the areas of behavior disorder, child-rearing, the work situation, and habit change.

Psych. 324 Personality: Theory and Application **4 hours**

The course covers major theories of personality and principles of personal adjustment and growth, including development, motivation, dynamics, problems in group living, and intellectual, emotional, and social adjustment. The course should be valuable to the potential doctor, nurse, social worker, child-care worker, teacher, or parent.

Psych. 325 Abnormal Psychology **4 hours**

The development, dynamics, social significance, and theoretical implications of deviant behavior. While the traditional psychiatric diagnostic categories are studied, there is a strong emphasis upon alternative approaches to the medical model of abnormality. The concepts of normality and abnormality in relation to cultural norms and stereotypes are examined in depth. The course should prove particularly useful to students planning on a career in the helping professions.

Psych. 326 Experimental Social Psychology **4 hours**

The aspects of social behavior and specific social issues are examined within the context of theory and experimental research. Topics include social factors in the development of morals, cooperation and competition, aggression, racial and social-class differences in personality, motivation, language, attitudes and attitude change, authoritarianism and obedience, interpersonal and group processes (affiliation, attraction, perception, conformity, and leadership), and discussion of drug and sex issues.

Psych. 327 Seminar in Theories and Techniques of Psychotherapy and Counseling	4 hours
The course provides the student with a basic knowledge of the varied theories and techniques used in professional psychotherapy and counseling. Both academic and experiential learning are included, which should be particularly useful to students interested in going on into one of the helping professions such as clinical psychology, psychiatry, social work, school psychology, counseling, or occupational therapy. <i>Prerequisites: Psych. 100 and 324 or 325 plus permission of the instructor.</i>	
Psych. 328 Human Sexuality	2 hours
An examination of the various psychological, biological, social, comparative, legal, and ethical aspects of human sexuality. In addition to sexual anatomy, physiology, birth control, and sexually transmitted disease, the course takes up current issues such as sex-role development and sex therapy. (May be taken for credit as Ed. 328.)	
Psych. 335 Biological Bases of Behavior	2 hours
An examination of the neural and biochemical substrata of the more important aspects of animal and human behavior. <i>Prerequisite: Psych. 100.</i>	
Psych. 410 Tests and Measurements	2 hours
The study of a variety of assessment instruments for the purpose of educational evaluation placement, diagnosis, and intervention. Students administer formal tests and develop informal tests as a means of acquiring skills with standardized, norm-referenced, criteria-referenced, diagnostic, and achievement tests to provide appropriate educational programs for the learning disabled student. <i>Prerequisite: Ed. 348.</i> (May be taken for credit as Sp.Ed. 410.)	
Psych. 415 Systematic Psychology	4 hours
An examination of the systematic positions and theories that have been important in the history of psychology, as well as a brief review of the philosophical bases underlying these positions.	
Psych. 477 Senior Seminar	2 hours
An introduction to professional opportunities in psychology and related fields and an exploration of value and ethical consideration. Continued guidance on senior project and senior comprehensive examinations also is provided during the course.	
Psych. 480 Methods and Materials in Teaching Psychology	4 hours
A study of the methods and materials used in teaching psychology in the secondary school. The course has a systematic and experimental emphasis. <i>Prerequisite: 16 hours of psychology.</i> (May be taken for credit as Ed. 480.)	
Psych. 487-488 Independent Study	2 or 4 hours
Psych. 490 Senior Project	2-8 hours.

Religious Studies

Aims

The Religious Studies program emphasizes the study of religion in the context of the broader concerns of the nature and meaning of human existence. Religion provides a perspective for reflecting on the world in which we live, the values we hold, and the way in which we express those values in word and deed. Thus, the program is designed to place the study of religion in terms of the question, “What does it mean to be a human being in this world?” Therefore, the program concentrates on teaching the student the primary ways to study religion in the modern world. As such, the Religious Studies major is intentionally interdisciplinary. It seeks to integrate the study of the origins and historical development of both Western and Eastern religious traditions, the various manifestations of religion (for example, sacred texts, myths, symbols, rituals,

and institutions), and the variety of ways in which religion may be analyzed and interpreted.

Requirements for Major

Concentration in Religious Studies requires a minimum of 30 hours in the department exclusive of R.S. 100 and the Senior Project. The following courses are required: R.S. 220, 240 or 243, 301, 311, 321, 322, 344. Also required are I.S. 251 and 252.

Requirements for Minor

R.S. 220 or 321, 240 or 243, 301 or 311, plus eight additional hours from Religious Studies exclusive of R.S. 100.

R.S. 100	Judaeo-Christian Heritage and Contemporary Living	4 hours
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A study of the Judaeo-Christian heritage with the aim of understanding how Biblical writers reflect on the basic human and social issues which continue to engage contemporary people. Study is done within a triple context: (1) the Biblical tradition; (2) the liberal arts tradition of Bethany College; (3) contemporary questions.

R.S. 220 Introduction to the Study of Religion 4 hours

An intellectual, historical, and comparative survey of the major interpretive approaches in religious studies. The methodological orientations of figures such as Rudolf Otto, Mircea Eliade, Joachim Wach, and others are discussed.

R.S. 221	World Religious	4 hours
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Rel. 221 World Religions 1 hour
An introductory and comparative study of the role and meaning of religion throughout the world. Emphasis is placed on constructing a model for mapping and understanding different ways of being religious in Western religious traditions, Eastern religious traditions, and tribal religions.

R.S. 240 Japanese Religions 4 hours

An introduction to the historical development of Japanese religion and culture through the study of its major spiritual expressions: Japanese shamanism and folk religion, Zen Buddhism, Confucianism, State Shinto, and the new religious movements of the modern period.

R.S. 243 Sacred Biography and Buddhism 4 hours

A study of the basic teachings and practices of Buddhism through a close textual study of Theravada and Mahayana Buddhist scriptures. The focus of the course is on the life of the Buddha and various Buddhist spiritual figures.

R.S. 245 Ghosts, Monsters, and Demons in Japan and the West 4 hours

A religious-historical study of stories about the strange, the uncanny, and the monstrous in a comparative analysis of Japanese and Western contexts.

R.S. 260 Creation Mythology**2 hours**

A comparative study of creation stories drawn from several distinct cultures, times, and places. Topics for discussion include the nature of creation mythology, the ways in which creation stories serve as models for present world order, and creation mythology in the modern world.

R.S. 264 Justice, Law, and Religion 2 hours

An exploration of the “law codes” of several distinct religious traditions and the various views of justice found in these religious traditions. The course focuses on the relationship between law and religion.

R.S. 301	The Pentateuch	4 hours
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A study of the first five books of the Bible, emphasizing the central religious traditions of the Jewish faith: creation, patriarchs, exodus, Sinai, and wilderness. The course is an introduction to Israelite history, the development of religious practices in Israel, and a broad range of theological perspectives in ancient Israel.

R.S. 303 Job **2 hours**

An intensive study of the book of Job in the context of Ancient Near Eastern wisdom thought and subsequent retellings of the story of Job. Emphasis is on the theological issue of the suffering of the righteous and on the relationship between story and theology.

- R.S. 304 Mission and Message of the Prophets** **2 hours**
The critical and appreciative reading of selected writings of the classical prophets of ancient Israel (Amos, Hosea, Isaiah, Jeremiah, and Ezekiel). Emphasis is on the major ideas of the prophets and the relationship of these ideas to the issues facing both ancient and modern people.
- R.S. 311 Studies in the Gospels** **4 hours**
An introduction to methods for discerning the messages of the gospel writers; emphasizing the Gospel of Mark. *Prerequisites: R.S. 100 and permission of the instructor.*
- R.S. 312 Galatians and Romans** **2 hours**
A close and critical examination of the Biblical books of Galatians and Romans and an introduction to the life and ministry of Paul.
- R.S. 321 Myth, Symbol, and Ritual** **4 hours**
Drawing on the works of Victor Turner and Mircea Eliade, symbols and the ways in which they are expressed through myths and ritual actions are explored. Emphasis is on the ways in which myth, symbols, and rituals serve as fundamental means for structuring human existence in the context of the sacred.
- R.S. 322 Sociology of Religion** **4 hours**
A study of formal religion and its functional equivalents both in primitive and modern societies. the relationship between religion and other social institutions, and religion and social change. (May be taken for credit as Soc. 356.)
- R.S. 331 Sacred History and Religious Traditions** **4 hours**
An exploration of the distinct types of sacred history found in Islam, Judaism, Christianity, and Buddhism. The course focuses on images of human history and human fulfillment revealed in these religious traditions.
- R.S. 344 Tribal Religious** **2 hours**
A study of cosmological and ritual order in several tribal societies. Topics include the "primitive" as a category for the Western experience of the other, art and symbolism in religion, orientations in time and space, oral tradition, and millerarianism.
- R.S. 351 Ancient Near Eastern Civilization** **4 hours**
An introduction to the historical development of life, culture, and religions of Mesopotamia, Egypt, and the Syro-Phoenician coast, including international relations from pre-history to Alexander the Great. (May be taken for credit as Hist. 351.)
- R.S. 352 Islamic Civilization** **4 hours**
A study of the life and background of the prophet, the *Qur'an*, the development of Islamic thought, and the early Islamic empires.
- R.S. 353 Hellenistic Civilization** **4 hours**
An introduction to the Graeco-Roman Oriental world based on a survey of social and cultural developments from Alexander the Great to Julius Caesar. (May be taken for credit as Hist. 353.)
- R.S. 361 American Catholicism** **2 hours**
A descriptive study of contemporary American Catholicism and its roots. The course emphasizes such topics as modern Catholic worship, the crisis of authority, the "immigrant church," the church and political life, Catholic education, and the charismatic movement.
- R.S. 362 American Judaism** **2 hours**
A descriptive study of contemporary American Judaism and its roots. The course emphasizes the life-cycle customs of Judaism. Jewish holidays are studied in the context of Jewish history. The course seeks to develop a broader understanding of the modern Jewish community in the United States and is supported by a grant from the Jewish Chautauqua Society.
- R.S. 363 Alexander Campbell and His Reformation** **4 hours**
A study of the background, life, thought and historical contexts and outcomes of Alexander Campbell and his colleagues and successors. Special topics and interests will be covered according to the special interests and research of the instructor.

R.S. 365 Pilgrimage and Religion**2 hours**

A comparative exploration of pilgrimage as a ritual process in distinct religious traditions (both Western and Eastern). The student gains insight into the ways in which pilgrimage brings about spiritual transformation, a shift in worldview, and the creation of specific forms of community.

R.S. 366 Dreams, Dreaming, and Religion**2 hours**

A comparative study of Western and non-Western understandings of dreams as a mode of apprehending and transforming human experience. Topics include the study of dreams and ontology, dreams and the sacred, therapeutic applications of dreaming, and dream theory as a means of interpreting myth, symbol, and ritual.

R.S. 367 Temples and Tradition**4 hours**

A comparative study of the temple as a sacred space in the history of religions. Topics include the nature of sacred space, the temple as model of contemporary world order and as symbol of ultimate reality, and temple worship and pilgrimage as a means for religious transformation.

R.S. 373 History of Early Christianity**4 hours**

An examination of the origins and expansion of Christianity from the period of Augustus Caesar to Constantine. The problem of institutions, consolidation, varieties, division, and unification is explored in historical context.

R.S. 487-488 Independent Study**2 or 4 hours****R.S. 490 Senior Project****2-8 hours**

Science Applications (Honors)

Aims

The Honors Program in Science Applications prepares students in the current theoretical and applied knowledge, skills, and techniques of applied sciences and engineering design; provides an engineering and scientific foundation for applied research through integrated studies in the physical and life sciences, mathematics, and computer science; produces a graduate with science and engineering preparation for graduate schools and corporate, industrial, and government research career options; achieves a combined technical and liberal arts education serving future career advancement in technological leadership roles.

Requirements for Major

Admission to this program is selective. All students in the program are required to complete a common base of 40 hours, including Chem. 101-102. Phys. 201-202, 222; C.S. 150 or 201, 202; Math. 201-202 and 341. In addition, all students must complete 8 hours of a common applied research and design component: S.A. 176, 276, 376, and 476; an internship (S.A. 470); the senior project (S.A. 490). S.A. 176, 276, 376, and 476 must be taken during the spring semester of the freshman, sophomore, junior, and senior year, respectively.

All students will also elect one of the following options: 1) For the degree in Science Applications, 24 hours of course work selected from the courses listed below, at least 12 of which must be chosen within a single area as listed. 2) For the degree in Chemistry, Mathematics, Computer Science, or Physics, 24 hours within the appropriate listing of courses for that field. (Biochemistry is part of the Science Applications degree program but is not a separate major.)

Chemistry 211-212, 322, 324, 326, 404, 414.

Mathematics 203, 344, 354, 383-384, 390, 401.

Computer Science 222, 280, 290, 330, 370, 380, 390; Math. 354, 383.

Physics 251, 261, 300, 305-306, 307-308, 314, 316, 318.

Biochemistry: Bio. 210, 290, 343, 425, 467; Chem. 211-212, 314.

S.A. 176 Introduction to Science Seminar **1 hour**
Students in this course meet once a week during the semester to discuss current topics of interest in science and math. They learn how to prepare to hear an outside expert discuss research, how to find pertinent references in the literature, and how to ask questions in the seminar format. Students are required to attend presentations made on campus by outside speakers in sciences.

S.A. 276 Seminar and Literature Search **1 hour**
Students in this course meet once a week during the semester. They attend and participate in seminars by outside experts and learn a systematic approach to searching the scientific literature appropriate to the area of emphasis. Electronic and “on line” methods are taught in addition to traditional methods of literature search.

S.A. 376 Preparing Research Proposals **1 hour**
Students in this course meet once a week during the semester. They select topics for research proposals by reading and defending short research papers from the published literature or by further investigation of an outside speaker’s topic. One of these proposals may be related to the internship. Research proposals are presented orally and defended.

S.A. 470 Internship in Science Applications **2 hours**
A faculty supervised, off-campus industrial work experience, co-sponsored and coordinated with a participating industry. *Prerequisites: Junior standing and approval of the Director of the Honors Program in Science Applications.*

S.A. 476 Seminar and Project Report **1 hour**
Students in this course meet once a week during the semester. They participate in the seminars by outside speakers, and each student presents an oral report on the summer internship and a preliminary oral report on his or her senior project.

S.A. 487-488 Independent Study **2 or 4 hours**

S.A. 490 Senior Project **2-8 hours**

Social Sciences

Social Sciences is a grouping of courses only. It is not a separate department. Students who participate in such programs as the American University Washington Semester and other similar off-campus programs may receive credit in this area.

Students majoring in History, Political Science, Economics, or Sociology who wish to be recommended for state certification in Social Studies must complete the following courses: Hist. 101, 201, 202, 225; Soc. 100 or 220; Eco. 200; G.S. 202 or Soc. Sci. 302; Pol. 225, 24 hours in their major field, the courses in the professional education sequence described in the listing of the Education Department (Ed. 201 and the minor in Secondary Education).

Soc. Sci. 202 Statistical Analysis with SPSS**1 hour**

An introduction to the use of Statistical Package for the Social Sciences in the computer analysis of experimental data. (Activity course: CR/NCR only.) *Prerequisites: Psych. 103; Math. 281, or permission of the instructor.*

Soc. Sci. 302 World Geography**2 hours**

The study of the physical, social, and political geographic factors of the world. Recent changes in Europe, Asia, and Africa are discussed.

Soc. Sci. 320 Cultural Backgrounds of British Literature**4 hours**

A survey of British history from the Celtic times to the present. Major political developments such as the development of parliamentary government and the constitution are taken into account, but major emphasis is placed on extra-political matters such as the development of the English language, music, art, architecture, drama, the English church, education, and domestic life. Every effort is made to take advantage of the locale to visit museums, castles, cathedrals, universities, Parliament, theatres, and concert halls. Taught in Oxford, England.

Soc. Sci. 480 Methods and Materials in Teaching Social Studies**2 hours**

An examination of the nature, objectives, and curricula of social studies in junior and senior high schools. Concepts and methods of approach are emphasized. Methods, techniques, teaching aids, resource units, lesson plans, evaluation, and teaching reading and study skills. (May be taken for credit as Ed. 480.)

Sociology and Social Work

Aims

To acquaint students with basic theories, research techniques, and applied practices in sociology, social work, and anthropology, and to prepare students for graduate study in these disciplines, or to enter professions in community service and other fields which require a knowledge of social relations.

Requirements for Major in Sociology

A minimum of 24 hours in Sociology, including Soc. 100, 301, 340, and 477, plus a Senior Project. Related requirements are Pol. 325 or 357. Soc. 100 or 220 is a prerequisite to Soc. 301, 309, 329, 353, 361, 470, and 477.

Requirements for Minor

Soc. 100, 340, plus eight additional hours from Sociology. (*Soc. 100 is a prerequisite for all courses in the minor.*)

Requirements for Teaching Certification

Only Sociology majors who have completed the following courses will be recommended for state certification to teach Social Studies in the secondary schools: Hist. 101, 201, 202, 225; Soc. 100; Econ. 200; G.S. 202 or Soc. Sci. 302; Pol. 225; I.S. 100; R.S. 100; Soc. Sci. 480; the requirements for certification for Social Studies Middle Childhood Education 5-8; the courses in the professional education sequence described in the listing of the Education Department (Ed. 201 and the minor in Secondary Education). *Soc. Sci. 480 is prerequisite to student teaching.*

- Soc. 100 Introduction to Sociology** **4 hours**
An introduction to basic concepts and perspectives of the study of society. Includes analysis of principal institution and social processes.
- Soc. 205 Social Problems** **4 hours**
The analysis of fundamental and continuing problems and dilemmas, such as crime and delinquency, racial and ethnic relationships, health care and maintenance, employment, housing, poverty, and environmental issues.
- Soc. 210 Race and Minority Concerns** **2 hours**
A survey of racial, cultural, ethnic, age, and sexual diversity with emphasis on the effects of prejudice and discrimination on minorities.
- Soc. 220 Cultural Anthropology** **4 hours**
The examination of cultural variability, especially in terms of its influence on human behavior. Comparative analysis of cultural systems with an emphasis on contemporary non-Western societies.
- Soc. 250 Urban Sociology** **4 hours**
A study of sociological aspects of the organization of American cities. Students explore the social, economic, and political aspects of urbanization, suburbanization, and rural-urban migration. Theoretical assumptions in urban sociology of the United States and non-western countries are examined, as well as aspects of urban planning and redevelopment.
- Soc. 256 Sociology of Developing Societies** **4 hours**
An exploration of elements of modernization and the process of technology. Cultural change, types of programs to induce change, and emergence and accommodation of institutions to change are examined. The changing population, family, community, and ideological structure are incorporated into the study.
- Soc. 300 Social Movements and Ideology** **2 hours**
An examination of the origins and development of religious, political, agrarian, and labor movements. Both historical and contemporary examples of revolutionary and reform movements are analyzed.
- Soc. 301 Sociological Theory** **4 hours**
An examination of social thought with primary emphasis upon the principal theorists from the 19th century to the present.
- Soc. 302 Schools and Society** **4 hours**
A study of the role of schools in a society, of the school as a formal and informal organization, and of the function of schooling. The course will utilize the methodologies of the disciplines of education, sociology, and other social sciences. Case studies and on-site observations combine with a variety of readings to provide a wide range of viewpoints for students to evaluate. (May be taken for credit as Ed. 302.)
- Soc. 309 Formal Organization** **4 hours**
Analysis of commercial, industrial, and public organizations and bureaucracies. Morale, subgroup conflict and cooperation, and the impact of social environment on organizational structure.
- Soc. 329 Population Study** **2 hours**
An introduction to demography. Theories and methods of studies concerning population size and composition. Trends of population change in the world and in the United States.
- Soc. 340 Research Methods and Statistics** **4 hours**
An introduction to the study and use of qualitative and quantitative methods. It includes both statistical and sociological analysis of social phenomena. The statistical study deals with numbers, frequencies, means, variance, regressions, multivariate analyses, and SPSS. The sociological study deals with the process of conducting social research, application of statistics, and computer technology. *Prerequisite: Math. 281.* (May be taken for credit as S.W. 340.)
- Soc. 351 Marriage and Family** **4 hours**
An examination of the structure and function of the family as a basic unit of social organization. Changing nature of marriage and the family in American society.

- Soc. 353 Social Stratification** **2 hours**
A study of forms of social stratification and differentiation. Study of class, prestige, and power as the bases of stratification. Theories of the cause of social stratification and social mobility.
- Soc. 356 Sociology of Religion** **4 hours**
A study of formal religion and its functional equivalents both in primitive and modern societies, the relationship between religion and other social institutions, and religion and social change. (May be taken for credit as R.S. 322.)
- Soc. 361 Deviance and Social Control** **4 hours**
A sociological examination of problems of deviance such as crime, mental illness, and sexual deviation. Institutions of correction and rehabilitation are examined.
- Soc. 470 Field Work** **2-8 hours**
A course open to students who are sufficiently advanced in their theoretical and methodological studies to undertake investigation of a practical or theoretical problem in a field setting. *Prerequisite: Permission of Department.*
- Soc. 477 Senior Seminar** **2 hours**
A consideration of conceptual and research problems in a seminar setting. Includes preparation for comprehensive examinations and senior projects.
- Soc. 487-488 Independent Study** **2 or 4 hours**
Studies may be planned as extensions of, or separate from, existing Department offerings.
- Soc. 490 Senior Project** **2-8 hours**
A course open to students approaching the completion of their majors. Designed to help students evaluate their activities in sociology and to integrate their educational experiences.

Requirements for Major in Social Work

The goal of the social work program is to prepare the student for beginning social work practice. Students will accomplish this goal by completing the following courses: S.W. 120, 220, 310, 340, 350, 352, 470, and 477. In addition, students must complete the following: Bio. 100, 167; Psych. 100; Soc. 205, 210; a senior project in social work. Students will be advised to take selected perspective courses to complete the Social Work major. S.W. 120 is a prerequisite to all courses in Social Work except S.W. 125-159.

Students majoring in social work are expected to complete liberal arts required courses before they begin the professional study courses for the major. Social work courses must be taken in sequence and students may not take the field placement course without completing all required social work course offerings.

The Social Work program is accredited at the BSW level by the Council on Social Work Education.

- S.W. 120 Introduction to Social Welfare and Social Work** **2 hours**
An examination of the origin and development of social welfare as an institution in the United States. Examination of the role of the social worker, and the place of the profession in society. Arranged field experience.

- S.W. 125-150 Special Topics in Social Work** **2 or 4 hours each**
Seminars in this category take up special topics of mutual concern to faculty and students.

- S.W. 125 Family and Child Welfare** **2 hours**
A comprehensive study of the principal child welfare services. It begins by defining child welfare, placing it as a field of practice within social work, and presents a scheme for the categorization of child welfare problems in terms of role theory. It provides a historical perspective on how and why welfare services developed to describe the current socioeconomic context in which they operate. Topics covered include adoption, child abuse and neglect, day care, foster care, and other child caring institutions.

- S.W. 130 Alcohol Use & Abuse** **2 hours**
A presentation of alcohol education to those interested in better understanding the effects of alcohol on individuals, families, and the community at large. Topics for study include the use

and misuse of alcohol throughout history, effects of alcohol on the human body, personal and societal costs of drinking, etiology of alcoholism, and considerations for special populations.

S.W. 135 Working With the Aged 2 hours

A study of the biological, psychological, social, economic, cultural, and spiritual factors of the aged in society. The course is overview for persons in the helping professions who want to work with older people individually or with members of families, groups, or organizations. Research efforts are presented that illuminate our present knowledge about various aspects of aging and about the heterogeneous elderly population in the United States.

S.W. 140 Appalachian Culture and Lifestyle 2 hours

A study of the cultural and lifestyle characteristics unique to the Appalachian region. Emphasis is placed on the aspects of rural community living and the societal impact on individuals based on economic, political, and geographical constraints.

S.W. 145 Women's Issues Across the Life Span 4 hours

An examination of the dilemmas facing women at various points throughout the life cycle. The study will include an exploration of the historical underpinnings of the women's movement, formation of female gender identity in childhood, followed by emphasis on adulthood, middle adulthood, and the later years of life.

S.W. 151-159 1 hour each

These courses are Activity courses and may be taken on a CR/NCR basis only.

S.W. 151 Students Offering Support

S.W. 152 Self-Defense and Rape Prevention

S.W. 220 Social Welfare Policies and Services 4 hours

The examination of the social political and economic context of social welfare policies and programs. Analysis of specific policy issues and their implications for professional social work practice.

S.W. 310 Human Behavior and the Social Environment 4 hours

An exploration of the person as an individual with the continuing potential for growth and change. The developmental process of the individual across the life span is studied with an emphasis on interaction with the social environment. The bio-psycho-socio-cultural determinants of behavior are studied integrating knowledge of the person-in-his/her situation. *Prerequisites: Bio. 100, 167.*

S.W. 340 Research Methods and Statistics 4 hours

An introduction to the study and use of qualitative and quantitative methods. It includes both statistical and sociological analysis of social phenomena. The statistical study deals with numbers, frequencies, means, variance, regressions, multivariate analyses and SPSS. The sociological study deals with the process of conducting social research, application of statistics, and computer technology. *Prerequisites: Math. 281, (May be taken for credit as Soc. 340.)*

S.W. 350 Social Work Practice I 4 hours

The first course in knowledge, skill, and value development for generalist practice. Basic theories and concepts undergirding skills for professional social work practice. Study focuses on professional values, social work roles, and social work client relationships. Skills in interviewing, data collection, and case recording are explored and practiced. Required field experience.

S.W. 352 Social Work Practice II 4 hours

The second course in knowledge, skill, and value development for generalist practice. In-depth and advanced examination of the social work process. Problem solving and intervention strategies are studied in relation to prevention, maintenance, and rehabilitation. The skill of social work practice is explored in the context of current programs and practice methods. Required field experience.

S.W. 455 Social Work Practice III 4 hours

The third course in knowledge, skill, and value development for generalist practice. Provides advanced professional knowledge which examines problems and issues of social work practice. The transitional role of the student moving from an undergraduate academic setting to the world of work and/or graduate study will be explored. Need for specific content not previously available to the student is arranged. Required field experience.

S.W. 470 Field Placement**12 hours**

An educationally directed internship experience in a social welfare agency or program as a social work practitioner. The field experience involves five full days each week during the fall semester of the senior year. The placement is designed to test and increase student practice skills with the goal of self direction and the appropriate use of supervision and consultation within the social work practice setting.

S.W. 487-488 Independent Study**2 or 4 hours**

Studies may be planned as extensions of, or separate from, existing Social Work offerings.

S.W. 490 Senior Project**2-8 hours**

Study is a directed research project in a specialized concentration of social work practice designed to allow the student to integrate both the field placement experience and academic knowledge.

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B.A., Bethany College; M.Div., Yale University; University of Buffalo; West Virginia University; Litt.D., Bethany College.

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B.S., Slippery Rock State College; M.Ed., Kent State University; Ed. D., West Virginia University.

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University of Dijon; B.A., Bethany College; M.A. and Prof. Dipl., Columbia University; University of Pittsburgh; University of London; University of Pennsylvania; University of Cambridge; University of Oxford; LL.D., Bethany College; LL.D., College of Steubenville; LL.D., Drury College; H.H.D., Wheeling College.

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B.A., Muskingum College; M.Ed., University of Pittsburgh; University of Wisconsin; New York University; University of Wyoming; University of Southern California; University of Michigan.

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B.S., Bethany College; M.A., West Virginia University; Texas Christian University.
(*Sabbatical: Fall Semester*).

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B.A., Bethany College; M.A., Ed.D., Columbia University; University of Nebraska; Oxford University; Harvard University; West Virginia University.

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B.A., Bethany College; M.A., West Virginia University; Mississippi State University.

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B.A., Cornell University; M.A., St. John's University; New York University.
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B.S., New York State College of Forestry; Ph.D., University of Wisconsin.
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B.S., Fairleigh Dickinson University; Ph.D., University of New Hampshire.
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B.A., Bethany College; B.D., Yale University; Ph.D., Emory University.
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B.A., Upsala College, M.A., Ph.D., University of Pittsburgh; University of Paris.
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B.S., Sul Ross State University; Ph.D., Texas A. & M. University; Iowa State University; Ohio State University; Carnegie Mellon University. (*Sabbatical: Spring Semester*).
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B.S. Alma College; M.A., Ph.D. Kent State University.
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B.A., Marshall University; M.S.W., West Virginia University; Ph.D., University of Pittsburgh; London School of Economics and Political Science.
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B.A., M.A., Ph.D., Michigan State University.
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B.A. Ottawa University; M.A., Ph.D., University of Kansas.
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Cert.Ed., University of Bristol; Dip.P.E., University of Leeds; M.Ed., University of Bristol; M.Sc., University of Bradford; M.A., University of Lancaster.

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B.A., University of Colorado M.A., Ph.D., Ohio State University; Massachusetts Institute of Technology.
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B.F.A. Rochester Institute of Technology; M.S., State University College of Buffalo; M.F.A. West Virginia University. (*Sabbatical: Fall Semester*).
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B.A., M.A., Ed.D., West Virginia University; The American University of Beirut.

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B.A., College of St. Thomas; Ph.D., University of Tennessee.

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B.A., Wabash College; M.S., Ph.D., Louisiana State University.

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B.S., Lebanese University; M.S. (Physics), M.S. (Mathematics: Computer Science), Ph.D., Ohio University.

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M.S. (Mathematics), Bombay University; M.S. (Mathematics and Physics), Australian National University; B.S., Ph.D., Gujarat University; University of South Carolina-Columbia.

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ROBYN R. COLE, *Assistant Professor of English*. (1968).
B.A., University of Maryland; M.A., University of Georgia; Ed.D., West Virginia University; Ohio University. (*Sabbatical: Spring Semester*)

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B.S., Manhattan College; M.S., Springfield College.

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B.A., M.S., Ohio University; Indiana University.

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Diploma, Padagogische Hochschule, Heidelberg; M.A., West Virginia University.

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A.A.S., Genesee Community College; B.S., Brockport State University; M.A.T., DePauw University.

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B.A., B.M.E., Wartburg College; M.A., University of Iowa.

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PATRICK A. CONDRON, *Catholic Chaplain; Lecturer in Religious Studies*. (1987).
M.Div., All Hallows College (Dublin); Notre Dame University.

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B.S., Slippery Rock State College; M.S., Slippery Rock University.

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B.A., West Liberty State College; M.A., West Virginia University.

LUKE L. HARDT, *Technical Director of the Bethany College Theatre*. (1989).
B.A., Bethany College; M.F.A., Temple University.

BRAD R. WARNIMONT, *Head Coach of Men's Baseball; Coordinator of Athletic Recruiting; Lecturer in Physical Education.* (1989).

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B.A., Pennsylvania State University; M.A., University of Pittsburgh (Special Education); M.A., West Virginia University (Educational Administration).

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B.A., Bethany College; M.Div., Yale Divinity School.

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A.A., East Los Angeles Community College; B.S., Eastern Oregon State College; M.S., Chadron State College.

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B.A., State University of New York at Oswego; M.A., Bowling Green State University.

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For Majors

Accounting	Thomas E. Kelly
Biology	John T. Burns
Chemistry	Milton R. Smith, Jr.
Communications	James Keegan
Computer Science	Fujiko Sawtarie
Economics and Business	Donald L. Eilenstine
Education	Ann C. Shelly
English	Larry Grimes
Fine and Applied Arts	David J. Judy
Foreign Languages	Pauline R. Nelson
General Science	Stanley Becker
Graphic Design	Walter Kornowski
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History.....	Gary Kappel
Interdisciplinary Studies	Anthony L. Mitch
Mathematics	Hasmukh Raval
Philosophy	Robert E. Myers
Physical Education	Donald D. Turner
Physics	Majid A. Sawtarie
Political Science	Albert J. Ossman, Jr.
Psychology	John H. Hull
Religious Studies	Frank H. Gorman, Jr.
Science Applications	Robert Paysen
Sociology and Social Work	Lynn F. Adkins

For Career Interests

Advertising	Patrick J. Sutherland
Dentistry	Gary E. Larson
Drama	David J. Judy
Engineering	Majid A. Sawtarie
Law	Albert J. Ossman, Jr.
Medicine	Gary E. Larson
Ministry	Frank H. Gorman, Jr.
Newspaper	Tracy Maurer
Public Relations	Tracy Maurer
Radio	Patrick J. Sutherland
Social Work	Lynn F. Adkins
Teaching	Ann C. Shelly
Television	James Keegan
Veterinary Medicine	Gary E. Larson

For Special Services

Counseling	Mary Keen Krikorian, Greg Krikorian
Career Counseling	Donald L. Eilenstine
	John D. Davis
	W. Randolph Cooley
Developmental Studies	Dorothy K. Wamsley
Foreign Students	Majid A. Sawtarie, Michael Schmich, Gary E. Larson
Graduate Fellowships, Scholarships	Robert E. Myers
Ministerial Training Awards	Jerald E. Fuqua
Practicums	T. Gale Thompson
Social Security and Veterans' Benefits	John C. Giesmann
Social and Recreational Activities	Darline B. Nicholson
Special Advising	Christine Sampson
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DEVELOPMENTAL STUDIES

Dorothy K. Wamsley (Chair); Robin K. Bolling; Robyn R. Cole; Mary Ellen Komorowski; Mary Keen Krikorian (*Student Development Counselor*); Sheryl L. Reddy (*Associate Dean of Admission*).

FACULTY BUDGET

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INTERDISCIPLINARY STUDIES

Stanley L. Becker (Chair); W. Randolph Cooley; Gary H. Kappel; Lana Hartman Landon; Gary E. Larson; Anthony L. Mitch *Director of Interdisciplinary Studies*; Jocelyn Sheppard.

INTERNATIONAL EDUCATION

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JANUARY TERM

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JAPANESE CULTURE

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LIBRARY

John W. Lozier (Chair); Sarah Buchholz; Mildred K. Galentine; John C. Krug (*Director of the Library*); Mark W. MacWilliams; Robert A. Paysen; Jocelyn Sheppard.

PRACTICUM REVIEW

T. Gale Thompson (Chair); Janice L. Forsty; Piri Halasz; Thomas E. Kelly; Ahmad Khalili; Mark Krause; Wallace B. Neel; Dirk Schlingmann; Patrick J. Sutherland.

SCHOLARSHIP

John W. Lozier (Chair); Stanley L. Becker; Theodore W. Bunnell (*Director of Financial Aid*); Robert E. Myers; Robert C. Nolan (*Vice President for Development*).

SOCIAL WORK ADVISORY

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STUDENT LIFE

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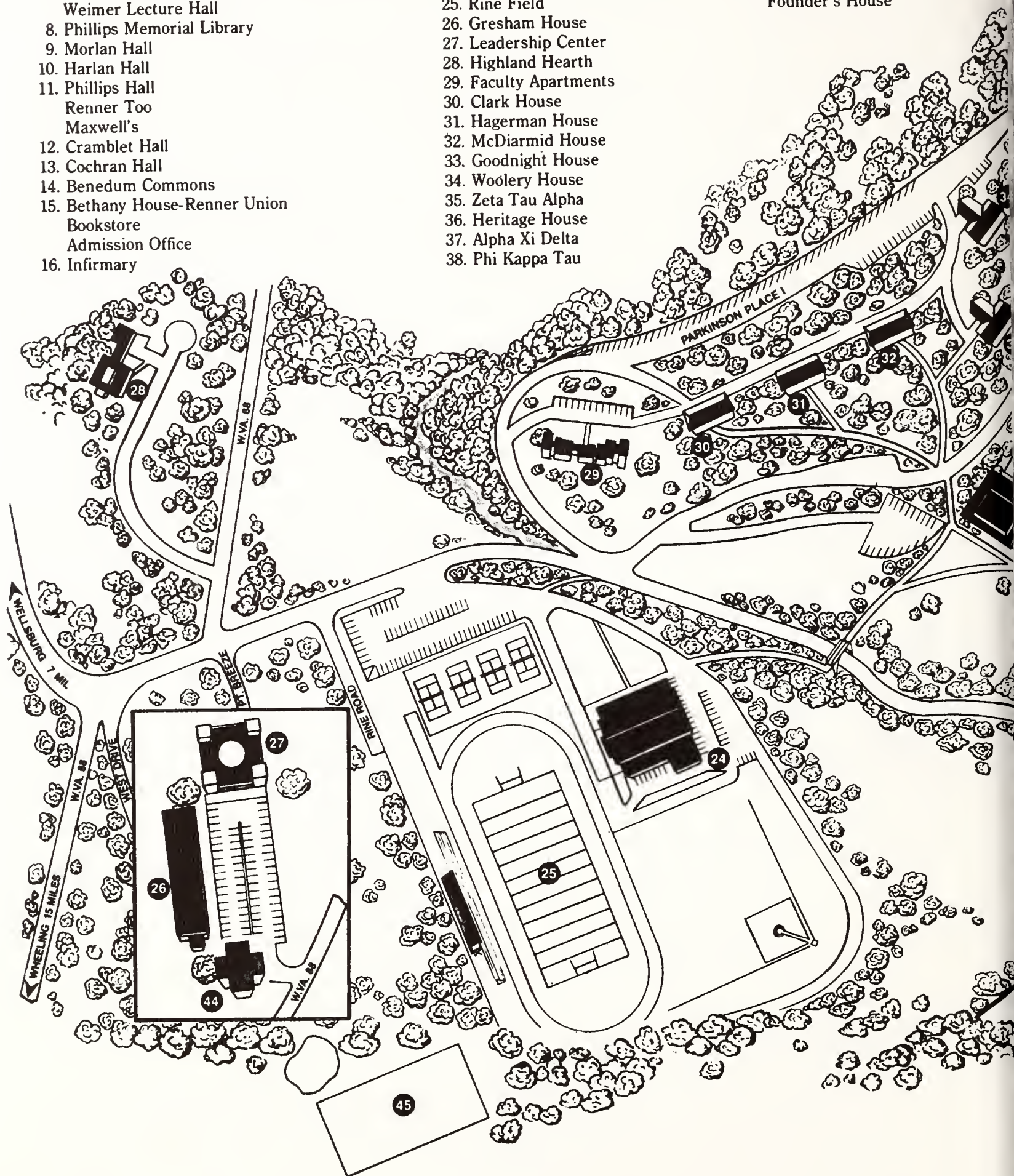
Ann C. Shelly (Chair; *Director of Teacher Education Programs*); Lynn F. Adkins, Richard M. Bernard (*Dean of the Faculty*); John U. Davis; Mary Ellen Komorowski; Lana Hartman Landon; John J. McGowan; Dorothy K. Wamsley.

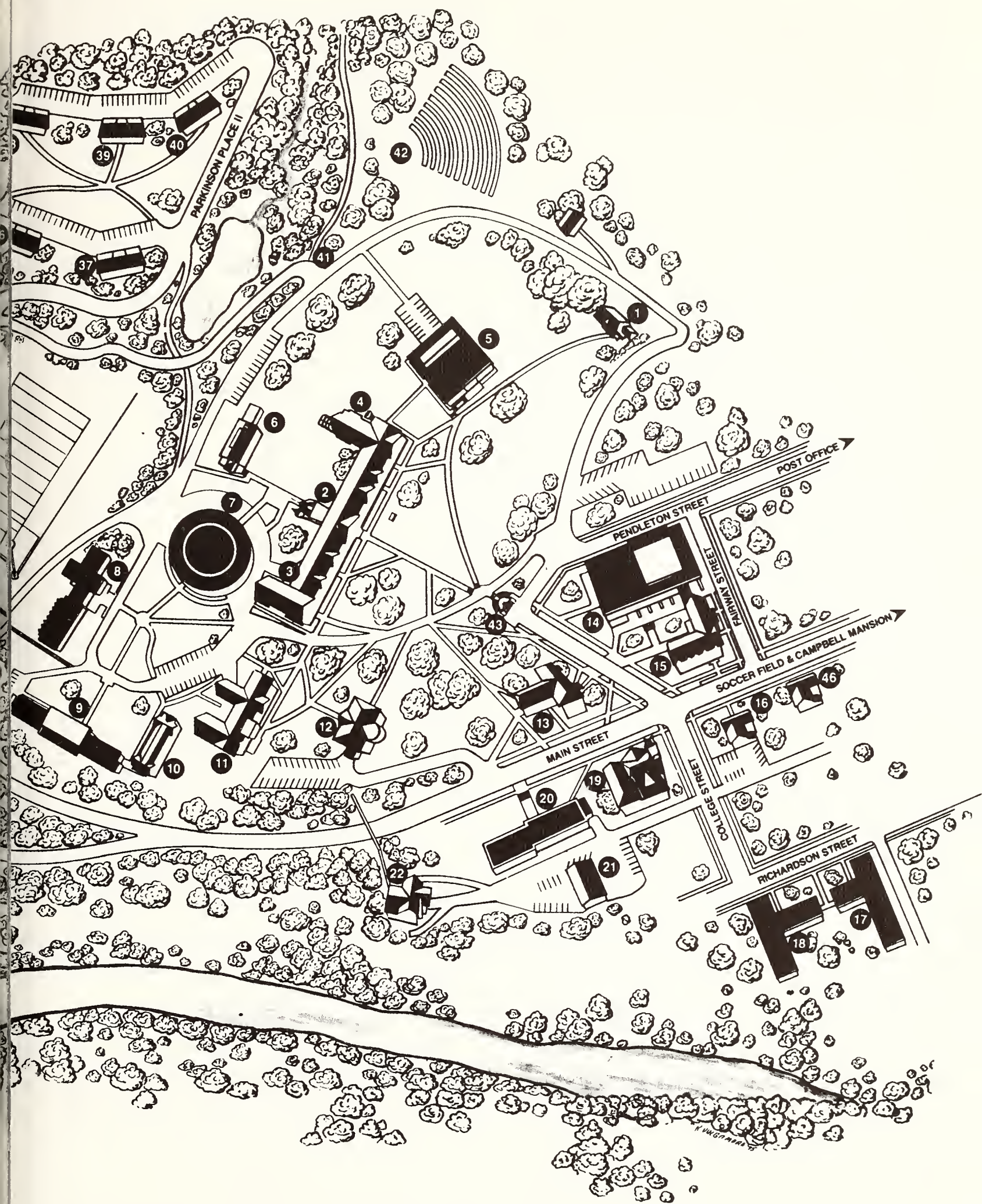
Bethany

1. Pendleton Heights
2. Old Main
3. Commencement Hall
4. Oglebay Hall
5. Steinman Fine Arts Center
Wailes Theater
6. Grace Phillips Johnson Visual Arts Center
7. Richardson Hall of Science
Weimer Lecture Hall
8. Phillips Memorial Library
9. Morlan Hall
10. Harlan Hall
11. Phillips Hall
Renner Too
Maxwell's
12. Cramblet Hall
13. Cochran Hall
14. Benedum Commons
15. Bethany House-Renner Union
Bookstore
Admission Office
16. Infirmary

17. McEachern Hall
18. McLean Hall
19. Bethany Memorial Church
20. Campbell Hall
21. Physical Plant
22. Heating Plant
23. Knight Natatorium
24. Alumni Field House
25. Rine Field
26. Gresham House
27. Leadership Center
28. Highland Hearth
29. Faculty Apartments
30. Clark House
31. Hagerman House
32. McDiarmid House
33. Goodnight House
34. Woolery House
35. Zeta Tau Alpha
36. Heritage House
37. Alpha Xi Delta
38. Phi Kappa Tau

39. Kappa Delta
40. Phi Mu
41. Weimer Nature Trail
42. Amphitheater
43. Oglebay Gates
44. Harder Hall
45. Athletic Field
46. Delta Tau Delta
Founder's House





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NOTICES

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